there clawing frantically was . . . the THING!

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"It sure does," replied Ed, enthusiastically.

"Don't waste your time," advised Luke. "You can't learn how to be a salesman. A fellow has to be 'born' that way to be a good salesman."

Ed just smiled at that, but he said nothing. Soon afterward he quit the shop, and we forgot about him. And then last night, I met Ed again—driving a snappy new sedan and dressed like a million dollars.

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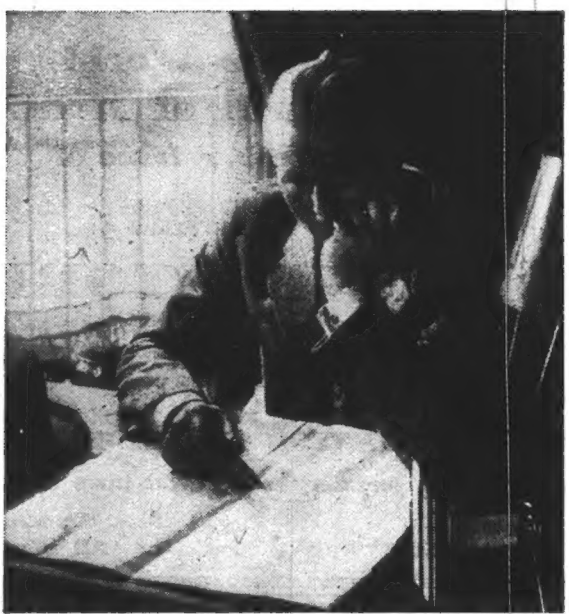

A man *past* 40

BECAUSE of his position, the man "higher up" may have halitosis (unpleasant breath) and get away with it. But with the employee whose shoes are easy to fill it's a different story. Records show that halitosis is excuse enough for letting a man go—especially if his work puts him in contact with others whom he may offend.

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Remember, also, that not one person in ten escapes halitosis entirely. Every day in even normal mouths, conditions capable of causing halitosis are likely to arise or are already present.

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LISTERINE *ends* halitosis

I saw the famous Science Temple with its constant stream of worshippers.

A Problem in Communication

By Miles J. Breuer, M. D.

PART I

The Science Community

(This part is related by Peter Hagstrom, Ph.D.)

"THE ability to communicate ideas from one individual to another," said a professor of sociology to his class, "is the principal distinction between human beings and their brute forbears. The increase and refinement of this ability to communicate is an index of the degree of civilization of a people. The more civilized a people, the more perfect their ability to communicate, especially under difficulties and in emergencies."

As usual, the observation burst harmlessly over the heads of most of the students in the class, who were preoccupied with more immediate things—with the evening's movies and the week-end's dance. But upon two young men in the class, it made a powerful impres-

The delivery of his country into the clutches of a merciless, ultra-modern religion can be prevented only by Dr. Hagstrom's deciphering an extraordinary code.

sion. It crystallized within them certain vague conceptions and brought them to a conscious focus, enabling the young men to turn formless dreams into concrete acts. That is why I take the position that the above enthusiastic words of this sociology professor, whose very name I have forgotten, were the prime moving influence which many years later succeeded in saving Occidental civilization from a catastrophe which would have been worse than death and destruction.

ONE of these young men was myself, and the other was my lifelong friend and chum, Carl Benda, who saved his country by solving a tremendously difficult scientific puzzle in a simple way, by sheer reasoning power, and without apparatus. The sociology professor struck a responsive chord in us; for since our earliest years we had wigwagged to each other as Boy Scouts, learned the finger alphabet of the deaf and dumb so that we might maintain communication during school hours, strung a telegraph wire between our two homes, admired Poe's "Gold Bug" together and devised boyish cipher codes in which to send each other postcards when chance separated us. But we had always felt a little foolish about what we considered our childish hobbies, until the professor's words suddenly roused us to the realization that we were a highly civilized pair of youngsters.

Not only did we then and there cease feeling guilty about our secret ciphers and our dots and dashes, but the determination was born within us to make of communication our life's work. It turned out that both of us actually did devote our lives to the cause of communication; but the passing years saw us engaged in widely and curiously divergent phases of the work. Thirty years later, I was Professor of the Psychology of Language at Columbia University, and Benda was Maintenance Engineer of the Bell Telephone Company of New York City; and on his knowledge and skill depended the continuity and stability of that stupendously complex traffic, the telephone communication of Greater New York.

SINCE our ambitious cravings were satisfied in our everyday work, and since now ordinarily available methods of communication sufficed our needs, we no longer felt impelled to signal across the housetops with semaphores nor to devise ciphers that would defy solution. But we still kept up our intimate friendship and our intense interest in our beloved subject. We were just as close chums at the age of fifty as we had been at ten, and just as thrilled at new advances in communication: at television, at the international language, at the supposed signals from Mars.

That was the state of affairs between us up to a year ago. At about that time Benda resigned his position with the New York Bell Telephone Company to accept a place as the Director of Communication in the Science Community. This, for many reasons, was a most amazing piece of news to myself and to anyone who knew Benda.

Of course, it was commonly known that Benda was being sought by Universities and corporations; I know personally of several tempting offers he had received. But the New York Bell is a wealthy corporation and had thus far managed to hold Benda, both by the munificence of its salary and by the attractiveness of the work it offered him. That the Science Community would want Benda was easy to understand; but, that it could outbid the New York Bell, was, to say the least, a surprise.

Furthermore, that a man like Benda would want to have anything at all to do with the Science Community seemed strange enough in itself. He had the most practical common sense—well-balanced habits of thinking and living, supported by an intellect so

clear and so keen that I knew of none to excel it. What the Science Community was, no one knew exactly; but that there was something abnormal, fanatical, about it, no one doubted.

THE Science Community, situated in Virginia, in the foothills of the Blue Ridge, had first been heard of many years ago, when it was already a going concern. At the time of which I now speak, the novelty had worn off, and no one paid any more attention to it than they do to Zion City or the Dunkards. By this time, the Science Community was a city of a million inhabitants, with a vast outlying area of farms and gardens. It was modern to the highest degree in construction and operation; there was very little manual labor there; no poverty; every person had all the benefits of modern developments in power, transportation, and communication, and of all other resources provided by scientific progress.

So much, visitors and reporters were able to say.

The rumors that it was a vast socialistic organization, without private property, with equal sharing of all privileges, were never confirmed. It is a curious observation that it was possible, in this country of ours, for a city to exist about which we knew so little. However, it seemed evident from the vast number and elaboration of public buildings, the perfection of community utilities such as transportation, streets, lighting, and communication, from the absence of individual homes and the housing of people in huge dormitories, that some different, less individualistic type of social organization than ours was involved. It was obvious that as an organization, the Science Community must also be wealthy. If any of its individual citizens were wealthy, no one knew it.

I knew Benda as well as I knew myself, and if I was sure of anything in my life, it was that he was not the type of man to leave a fifty thousand dollar job and join a communist city on an equal footing with the clerks in the stores. As it happens, I was also intimately acquainted with John Edgewater Smith, recently Power Commissioner of New York City and the most capable power engineer in North America, who, following Benda by two or three months, resigned his position and accepted what his letter termed the place of Director of Power in the Science Community. I was personally in a position to state that neither of these men could be lightly persuaded into such a step, and that neither of them would work for a small salary.

BENDA'S first letter to me stated that he was at the Science Community on a visit. He had heard of the place, and while at Washington on business had taken advantage of the opportunity to drive out and see it. Fascinated by the equipment he saw there, he had decided to stay a few days and study it. The next letter announced his acceptance of the position. I would give a month's salary to get a look at those letters now; but I neglected to preserve them. I should like to see them because I am curious as to whether they exhibit the characteristics of the subsequent letters, some of which I now have.

As I have stated, Benda and I had been on the most intimate terms for forty years. His letters had always been crisp and direct, and thoroughly familiar and confidential. I do not know just how many letters I received from him from the Science Community before I noted the difference, but I have one from the third month of his stay there (he wrote every two or three weeks), characterized by a verbosity that sounded strange for him. He seemed to be writing merely to cover the sheet, trifles such as he had never previously considered worth writing letters about. Four pages of letter conveyed not a single idea. Yet Benda was, if anything, a man of ideas.

There followed several months of letters like that: a lot of words, eva-

sion of coming to the point about anything; just conventional letters. Benda was the last man to write a conventional letter. Yet, it was Benda writing them; gruff little expressions of his, clear ways of looking at even the veriest trifles, little allusion to our common past: these things could neither have been written by anyone else, nor written under compulsion from without. Something had changed Benda.

I PONDERED on it a good deal, and could think of no hypothesis to account for it. In the meanwhile, New York City lost a third technical man to the Science Community. Donald Francisco, Commissioner of the Water Supply, a sanitary engineer of international standing, accepted a position in the Science Community as Water Director. I did not know whether to laugh and compare it to the National Baseball League's trafficking in "big names," or to hunt for some sinister danger sign in it. But, as a result of my ponderings, I decided to visit Benda at The Science Community.

I wrote him to that effect, and almost decided to change my mind about the visit because of the cold evasiveness of the reply I received from him. My first impulse on reading his indifferent, lackadaisical comment on my proposed visit was to feel offended and determine to let him alone and never see him again. The average man would have done that, but my long years of training in psychological interpretation told me that a character and a friendship built during forty years does not change in six months, and that there must be some other explanation for this. I wrote him that I was coming. I found that the best way to reach the Science Community was to take a bus out from Washington. It involved a drive of about fifty miles northwest, through a picturesque section of the country. The latter part of the drive took me past settlements that looked as though they might be in about the same stage of progress as they had been during the American Revolution. The city of my destination was back in the hills, and very much isolated. During the last ten miles we met no traffic at all, and I was the only passenger left in the bus. Suddenly the vehicle stopped.

"Far as we go!" the driver shouted.

I looked about in consternation. All around were low, wild-looking hills. The road went on ahead through a narrow pass.

"They'll pick you up in a little bit," the driver said as he turned around and drove off, leaving me standing there with my bag, very much astonished at it all.

HE was right. A small, neat-looking bus drove through the pass and stopped for me. As I got in, the driver mechanically turned around and drove into the hills again.

"They took up my ticket on the other bus," I said to the driver. "What do I owe you?"

"Nothing," he said curtly. "Fill that out." He handed me a card.

An impertinent thing, that card was. Besides asking for my name, address, nationality, vocation, and position, it requested that I state whom I was visiting in the Science Community, the purpose of my visit, the nature of my business, how long I intended to stay; did I have a place to stay arranged for, and if so, where and through whom. It looked for all the world as though they had something to conceal; Czarist Russia couldn't beat that for keeping track of people and prying into their business. Sign here, the card said.

It annoyed me, but I filled it out, and, by the time I was through, the bus was out of the hills, traveling up the valley of a small river; I am not familiar enough with northern Virginia to say which river it was. There was much machinery and a few people in the broad fields. In the distance ahead was a mass of chimneys and the cupolas of iron-works, but no smoke.

There were power-line towers with high-tension insulators, and, far ahead, the masses of huge elevators and big, square buildings. Soon I came in sight of a veritable forest of huge windmills.

In a few moments, the huge buildings loomed up over me; the bus entered a street of the city abruptly from the country. One moment on a country road, the next moment among towering buildings. We sped along swiftly through a busy metropolis, bright, airy, efficient looking. The traffic was dense but quiet, and I was confident that most of the vehicles were electric; for there was no noise nor gasoline odor. Nor was there any smoke. Things looked airy, comfortable, efficient; but rather monotonous, dull. There was a total lack of architectural interest. The buildings were just square blocks, like neat rows of neat boxes. But, it all moved smoothly, quietly, with wonderful efficiency.

MY first thought was to look closely at the people who swarmed the streets of this strange city. Their faces were solemn, and their clothes were solemn. All seemed intently busy, going somewhere, or doing something; there was no standing about, no idle sauntering. And look whichever way I might, everywhere there was the same blue serge, on men and women alike, in all directions, as far as I could see.

The bus stopped before a neat, square building of rather smaller size, and the next thing I knew, Benda was running down the steps to meet me. He was his old gruff, enthusiastic self.

"Glad to see you, Hagstrom, old socks!" he shouted, and gripped my hand with two of his. "I've arranged for a room for you, and we'll have a good old visit, and I'll show you around this town."

I looked at him closely. He looked healthy and well cared-for, all except for a couple of new lines of worry on his face. Undoubtedly that worn look meant some sort of trouble.

PART II

The New Religion

(This part is interpolated by the author into Dr. Hagstrom's narrative.)

EVERY great religion has as its psychological reason for existence the mission of compensating for some crying, unsatisfied human need. Christianity spread and grew among people who were, at the time, persecuted subjects or slaves of Rome; and it flourished through the Middle Ages at a time when life held for the individual chiefly pain, uncertainty, and bereavement. Christianity kept the common man consoled and mentally balanced by minimizing the importance of life on earth and offering compensation afterwards and elsewhere.

A feeble nation of idle dreamers, torn by a chaos of intertribal feuds within, menaced by powerful, conquest-lusting nations from without, Arabia was enabled by Islam, the religion of her prophet Mohammed, to unite all her sons into an intense loyalty to one cause, and to turn her dream-stuff into reality by carrying her national pride and honor beyond her boundaries and spreading it over half the known world.

The ancient Greeks, in despair over the frailties of human emotion and the unbecomingness of worldly conduct, which their brilliant minds enabled them to recognize clearly but which they found themselves powerless to subdue, endowed the gods, whom they worshipped, with all of their own passions and weaknesses, and thus the foolish behavior of the gods consoled them for their own obvious shortcomings. So it goes throughout all of the world's religions.

In the middle of the twentieth century there were in the civilized world, millions of people in whose lives Christianity had ceased to play any part. Yet, psychically—remember, "psyche" means "soul"—they were just as sick and unbalanced, just as

much in need of some compensation as were the subjects of the early Roman empire, or the Arabs in the Middle Ages. They were forced to work at the strained and monotonous pace of machines; they were the slaves, body and soul, of machines; they lived with machines and lived like machines—they were expected to *be* machines. A mechanized mode of life set a relentless pace for them, while, just as in all the past ages, life and love, the breezes and the blue sky called to them: but they could not respond. They had to drive machines so that machines could serve them. Minds were cramped and emotions were starved, but hands must go on guiding levers and keeping machines in operation. Lives were reduced to such a mechanical routine that men wondered how long human minds and human bodies could stand the restraint. There is a good deal in the writings of the times to show that life was becoming almost unbearable for three-fourths of humanity.

IT is only natural, therefore, that Rohan, the prophet of the new religion, found followers more rapidly than he could organize them. About ten years before the visit of Dr. Hagstrom to his friend Benda, Rohan and his new religion had been much in the newspapers. Rohan was a Slovak, apparently well educated in Europe. When he first attracted attention to himself, he was foreman in a steel plant at Birmingham, Alabama. He was popular as an orator, and drew unheard-of crowds to his lectures.

He preached of *Science* as God, an all-pervading, inexorably systematic Being, the true Center and Motive-Power of the Universe; a Being who saw men and pitied them because they could not help committing inaccuracies. The Science God was helping man become more perfect. Even now, men were much more accurate and systematic than they had been a hundred years ago; men's lives were ordered and rhythmic, like natural laws, not like the chaotic emotions of beasts and savages.

Somehow, he soon dropped out of the attention of the great mass of the public. Of course, he did so intentionally, when his ideas began to crystallize and his plans for his future organization began to form. At first he had a sort of church in Birmingham, called The Church of the Scientific God. There never was anything cheap nor blatant about him. When he moved his church from Birmingham to the Lovett Branch Valley in northern Virginia, he was hardly noticed. But with him went seven thousand people, to form the nucleus of the Science Community.

SINCE then, some feature writer for a metropolitan Sunday paper has occasionally written up the Science Community, both from its physical and its human aspects. From these reports, the outstanding bit of evidence is that Rohan believes intensely in his own religion, and that his followers are all loyal worshippers of the Science God. They conceive the earth to be a workshop in which men serve Science, their God, serving a sort of apprenticeship during which He perfects them to the state of ideal machines. To be a perfect machine, always accurate, with no distracting emotions, no getting off the track—that was the ideal which the Great God *Science* required of his worshippers. To be a perfect machine, or a perfect cog in a machine, to get rid of all individuality, all disturbing sentiment, that was their idea of supreme happiness. Despite the obvious narrowness it involved, there was something sublime in the conception of this religion. It certainly had nothing in common with the "Christian Science" that was in vogue during the early years of the twentieth Century: it towered with a noble grandeur above that feeble little sham.

The Science Community was organized like a machine; and all men played their parts, in government, in labor, in administration, in production, like per-

fect cogs and accurate wheels, and the machine functioned perfectly. The devotees were described as fanatical, but happy. They certainly were well trained and efficient. The Science Community grew. In ten years it had a million people, and was a world-wide wonder of civic planning and organization; it contained so many astonishing developments in mechanical service to human welfare and comfort that it was considered as a sort of model of the future city. The common man there was provided with science-produced luxuries, in his daily life, that were in the rest of the world the privilege of the wealthy few—but he used his increased energy and leisure in serving the more devotedly his God, Science, who had made machines. There was a great temple in the city, the shape of a huge dynamo-generator, whose interior was worked out in a scheme of mechanical devices, and with music, lights, and odors to help in the worship.

WHAT the world knew the least about was that this religion was becoming militant. Its followers spoke of the heathen without, and were horrified at the prevalence of the sin of individualism. They were inspired with the mission that the message of God—scientific perfection—must be carried to the whole world. But, knowing that vested interests, governments, invested capital, and established religions would oppose them and render any real progress impossible, they waited. They studied the question, looking for some opportunity to spread the gospel of their beliefs, prepared to do so by force, finding their justification in their belief that millions of sufferers needed the comforts that their religion had given them. Meanwhile, their numbers grew.

Rohan was Chief Engineer, which position was equal in honor and dignity to that of Prophet or High Priest. He was a busy, hard-worked man, black haired and gaunt, small of stature and fiery eyed: he looked rather like an overworked department-store manager rather than like a prophet. He was finding his hands more full every day, both because of the extraordinary fertility of his own plans and ideas, and because the Science Community was growing so rapidly. Among this heterogenous mass of proselyte strangers that poured into the city and was efficiently absorbed into the machine, it was yet difficult to find executives, leaders, men to put in charge of big things. And he needed constantly more and more of such men.

THAT was why Rohan went to Benda, and subsequently to others like Benda. Rohan had a deep-knowledge of human nature. He did not approach Benda with the offer of a magnanimous salary, but came into Benda's office asking for a consultation on some of the puzzling communication problems of the Science Community. Benda became interested, and on his own initiative offered to visit the Science Community, saying that he had to be in Washington anyway in a few days. When he saw what the conditions were in the Science Community, he became fascinated by its advantages over New York; a new system to plan from the ground up; no obsolete installation to wrestle with; an absolutely free hand for the engineer in charge; no politics to play; no concessions to antiquated city construction nor to feeble-minded city administration—just a dream of an opportunity. He almost asked for the job himself, but Rohan was tactful enough to offer it, and the salary, though princely, was hardly given a thought.

For many weeks, Benda was absorbed in his job, to the exclusion of all else. He sent his money to his New York bank and had his family move in and live with him. He was happy in his communication problems.

"Give me a problem in communication and you make me happy," he wrote

to Hagstrom in one of his early letters.

He had completed a certain division of his work on the Science Community's communication system, and it occurred to him that a few days' relaxation would do him good. A run up to New York would be just the thing.

To his amazement, he was not permitted to board the outbound bus.

"You'll need orders from the Chief Engineer's office," the driver said.

BENDA went to Rohan.

"Am I a prisoner?" he demanded, with his characteristic directness.

"An embrassing situation," the suave Rohan admitted, very calmly and at his ease. "You see, I'm nothing like a dictator here. I have no arbitrary power. Everything runs by system, and you're a sort of exception. No one knows exactly how to classify you. Neither do I. But, I can't break a rule. That is sin."

"What rule? I want to go to New York."

"Only those of the Faith who have reached the third degree can come and go. No one can get that in less than three years."

"Then you got me in here by fraud?" Benda asked bluntly.

Rohan side-stepped gracefully.

"You know our innermost secrets now," he expiained. "Do you suppose there is any hope of your embracing the Faith?"

Benda whirled on his heel and walked out.

"I'll think about it!" he said, his voice snapping with sarcasm.

Benda went back to his work in order to get his mind off the matter. He was a well-balanced man if he was anything; and he knew that nothing could be accomplished by rash words or incautious moves against Rohan and his organization. And on that day he met John Edgewater Smith.

"You here?" Benda gasped. He lost his equilibrium for a moment in consternation at the sight of his fellow-engineer.

Smith was too elated to notice Benda's mood.

"I've been here a week. This is certainly an ideal opportunity in my line of work. Even in Heaven I never expected to find such a chance."

By this time Benda had regained control of himself. He decided to say nothing to Smith for the time being.

THEY did not meet again for several weeks. In the meantime Benda discovered that his mail was being censored. At first he did not know that his letters, always typewritten, were copied and objectionable matter omitted, and his signature reproduced by the photo-engraving process, separately each time. But before long, several letters came back to him rubber-stamped: "Not passable. Please revise." It took Benda two days to cool down and rewrite the first letter. But outwardly no one would have ever known that there was anything amiss with him.

However, he took to leaving his work for an hour or two a day and walking in the park, to think out the matter. He didn't like it. This was about the time that it began to be a real issue as to who was the bigger man of the two, Rohan or Benda. But no signs of the issue appeared externally for many months.

John Edgewater Smith realized sooner than Benda that he couldn't get out, because, not sticking to work so closely, he had made the attempt sooner. He looked very much worried when Benda next saw him.

"What's this? Do you know about it?" he shouted as soon as he had come within hearing distance of Benda.

"What's the difference?" Benda replied causually. "Aren't you satisfied?"

Smith's face went blank.

Benda came close to him, linked arms, and led him to a broad vacant lawn in the park.

"Listen!" he said softly in Smith's ear. "Don't you suppose these people

who lock us in and censor our mail aren't smart enough to spy on what we say to each other?"

"Our only hope," Benda continued, "is to learn all we can of what is going on here. Keep your eyes and ears open and meet me here in a week. And now come on; we've been whispering here long enough."

ODDLY enough, the first clue to the puzzle they were trying to solve was supplied by Francisco, New York's former Water Commissioner. Why were they being kept prisoners in the city? There must be more reason for holding them there than the fear that information would be carried out, for none of the three engineers knew anything about the Science Community that could be of any possible consequence to outsiders. They had all stuck rigidly to their own jobs.

They met Francisco, very blue and dejected, walking in the park a couple of months later. They had been having weekly meetings, feeling that more frequent rendezvous might excite suspicion. Francisco was overjoyed to see them.

"Been trying to figure out why they want us," he said. "There is something deeper than the excuse they have made; that rot about a perfect system and no breaking of rules may be true, but it has nothing to do with us. Now, here are three of us, widely admitted as having good heads on us. We've got to solve this."

"The first fact to work on," he continued, is that there is no real job for me here. This city has no water problem that cannot be worked out by an engineer's office clerk. Why are they holding me here, paying me a profligate salary, for a job that is a joke for a grown-up man? There's something behind it that is not apparent on the surface."

The weekly meetings of the three engineers became an established institution. Mindful that their conversation was doubtless the object of attention on the part of the ruling powers of the city through spies and concealed microphones, they were careful to discuss trivial matters most of the time, and mentioned their problem only when alone in the open spaces of the park.

AFTER weeks of effort had produced no results, they arrived at the conclusion that they would have to do some spying themselves. The great temple, shaped like a dynamo-generator attracted their attention as the first possibility for obtaining information. Benda, during his work with telephone and television installation, found that the office of some sort of ruling council or board of directors were located there. Later he found that it was called the Science Staff. He managed to slip in several concealed microphone detectors and wire them to a private receiver on his desk, doing all the work with his own hands under the pretense of hunting for a cleverly contrived short-circuit that his subordinates had failed to find.

"They open their meeting," he said, reporting several days of listening to his comrades, "with a lot of religious stuff. They really believe they are chosen by God to perfect the earth. Their fanaticism has the Mohammedans beat forty ways. As I get it from listening in, this city is just a preliminary base from which to carry, forcibly, the gospel of Scientific Efficiency to the whole world. They have been divinely appointed to organize the earth.

"The first thing on the program is the seizure of New York City. And, it won't be long; I've heard the details of a cut-and-dried plan. When they have New York, the rest of America can be easily captured, for cities aren't as independent of each other as they used to be. Getting the rest of the world into their hands will then be merely a matter of routine; just a little time, and it will be done. Mohammed's wars weren't in it with this!"

Francisco and Smith stared at him aghast. These dull-faced, blue-serge-

clad people did not look capable of it; unless possibly one noted the fiery glint in their eyes. A world-wide Crusade on a scientific basis! The idea left them weak and trembling.

"Got to learn more details before we can do anything," Benda said. "Come on; we've been whispering here long enough; they'll get suspicious." Benda's brain was now definitely pitted against this marvelous organization.

"I'VE got it!" Benda reported at a later meeting, "I pieced it together from a few hours' listening. Devilish scheme!

"Can you imagine what would happen in New York in case of a breakdown in water-supply, electric power, and communication? In an hour there would be a panic; in a day, the city would be a hideous shambles of suffering, starvation, disease, and trampling maniacs. Dante's Inferno would be a lovely little pleasure-resort in comparison.

"Also, have you ever stopped to think how few people there are in the world who understand the handling of these vital elements of our modern civilized organization sufficiently to keep them in operation? There you have the scheme. Because they do not want to destroy the city, but merely to threaten it, they are holding the three of us. A little skilful management will eliminate all other possible men who could operate the city's machinery, except ourselves. We three will be placed in charge. A threat, perhaps a demonstration in some limited section of what horrors are possible. The city is at their mercy, and promptly surrenders.

"An alternative plan was discussed: just a little quiet violence could eliminate those who are now in charge of the city's works, and the panic and horrors would commence. But, within an hour of the city's capitulation, the three of us could have things running smoothly again. And there would be no New York; in its place would be Science Community Number Two. From it they could step on to the next city."

The other two stared at him. There was only one comment.

"They seem to be sure that they could depend on us," Smith said.

"They may be correct," Benda replied. "Would you stand by and see people perish if a turn of your hand could save them? You would, for the moment, forget the issue between the old order and the new religion."

They separated, horrified by the ghastly simplicity of the plan.

JUST following this, Benda received the telegram announcing the prospective visit of his lifelong friend, Dr. Hagstrom. He took it at once to Roman.

"Will my friend be permitted to depart again, if he once gets in here?" he demanded with his customary directness.

"It depends on you," Rohan replied blandly. "We want your friend to see our Community, and to go away and carry with him the nicest possible reports and descriptions of it to the world. I wonder, do I make myself clear?"

"That means I've got to feed him taffy while he's here?" Benda asked gruffly.

"You choose to put it indelicately. He is to see and hear only such things about the Science Community as well please the world and impress it favorably. I am sure you will understand that under no other circumstances will he be permitted to leave here."

Benda turned around abruptly and walked out without a word.

"Just a moment," Rohan called after him. "I am sure you appreciate the fact that every precaution will be taken to hear the least word that you say to him during his stay here? You are watched only perfunctorily now. While he is here you will be kept

track of carefully, and there will be three methods of checking everything you do or say. I am sure you do not underestimate our caution in this matter."

Benda spent the days intervening between then and the arrival of his friend Hagstrom, closed up in his office, in intense study. He figured things on pieces of paper, committed them to memory, and scrupulously burned the paper. Then he wandered about the park and plucked at leaves and twigs.

PART III

The Cipher Message

(Related by Peter Hagstrom, Ph.D.)

BENDA conducted me personally to a room very much like an ordinary hotel room. He was glad to see me. I could tell that from his grip of welcome, from his pleased face, from the warmth in his voice, from the eager way in which he hovered around me. I sat down on a bed and he on a chair.

"Now tell me all about it," I said.

The room was very still, and in its privacy, following Benda's demonstrative welcome, I expected some confidential revelations. Therefore I was astonished.

"There isn't much to tell," he said gaily. "My work is congenial, fascinating, and there's enough of it to keep me out of mischief. The pay is good, and the life pleasant and easy."

I didn't know what to say for a moment. I had come there with my mind made up that there was something suspicious afoot. But he seemed thoroughly happy and satisfied.

"I'll admit that I treated you a little shabbily in this matter of letters," he continued. "I suppose it is because I've had a lot of new and interesting problems on my mind, and it's been hard to get my mind down to writing letters. But I've got a good start on my job, and I'll promise to reform."

I was at a loss to pursue that subject any further.

"Have you seen Smith and Francisco?" I asked.

He nodded.

"How do they like it?"

"Both are enthusiastic about the wonderful opportunities in their respective fields. It's a fact: no engineer has ever before had such resources to work with, on such a vast scale, and with such a free hand. We're laying the framework for a city of ten millions, all thoroughly systematized and efficient. There is no city in the world like it; it's an engineer's dream of Utopia."

I WAS almost convinced. There was only the tiniest of lurking suspicions that all was not well, but it was not powerful enough to stimulate me to say anything. But I did determine to keep my eyes open.

I might as well admit in advance that from that moment to the time when I left the Science Community four days later, I saw nothing to confirm my suspicions. I met Smith and Francisco at dinner and the four of us occupied a table to ourselves in a vast dining hall, and no one paid for the meal nor for subsequent ones. They also seemed content, and talked enthusiastically of their work.

I was shown over the city, through its neat, efficient streets, through its comfortable dormitories each housing hundreds of families as luxuriously as any modern hotel, through its marvelous factories where production had passed the stage of labor and had assumed the condition of a devoted act of worship. These factory workers were not toiling; they were worshipping their God, of Whom each machine was a part. Touching their machine was touching their God. This machinery, while involving no new principles, was developed and coordinated to a degree that exceeded anything I had ever seen anywhere else.

I saw the famous Science Temple in

the shape of a huge dynamo-generator, with its interior decorations, paintings, carvings, frescoes, and pillars, all worked out on the motive of machinery; with its constant streams of worshippers in blue serge, performing their conventional rites and saying their prayer formulas at altars in the forms of lathes, microscopes, motors, and electron-tubes.

"You haven't become a Science Communist yourself?" I bantered Benda.

There was a metallic ring in the laugh he gave.

"They'd like to have me!" was all he said.

I WAS rather surprised at the emptiness of the large and well-kept park to which Benda took me. It was beautifully landscaped, but only a few scattering people were there, lost in its vast reaches.

"These people seem to have no need of recreation," Benda said. "They do not come here much. But I confess that I need air and relaxation, even if only for short snatches. I've been too busy to get away for long at a time, but this park has helped me keep my balance—I'm here every day for at least a few minutes."

"Beautiful place," I remarked. "A lot of strange trees and plants I never saw before—"

"Oh, mostly tropical forms, common enough in their own habitats. They have steam pipes under the ground to grow them. I've been trying to learn something about them. Fancy *me* studying natural history! I've never cared for it, but here, where there is no such thing as recreation, I have become intensely interested in it as a hobby. I find it very much of a rest to study these plants and bugs."

"Why don't you run up to New York for a few days?"

"Oh, the time will come for that. In the meanwhile, I've got an idea all of a sudden. Speaking of New York, will you do me a little service? Even though you might think it silly?"

"I'll do anything I can," I began, eager to be of help to him.

"It has been somewhat of a torture to me," Benda continue, "to find so many of these forms which I am unable to identify. I like to be scientific, even in my play, and reference books on plants and insects are scarce here. Now, if you would carry back a few specimens for me, and ask some of the botany and zoology people to send me their names—"

"Fine!" I exclaimed. "I've got a good-sized pocket notebook I can carry them in."

"Well then, please put them in the order in which I hand them to you, and send me the names by number. I am pretty thoroughly familiar with them, and if you will keep them in order, there is no need for me to keep a list. The first is a blade of this queer grass."

I filed the grass blade between the first two pages of my book.

"The next is this unusual-looking pinnate leaf." He tore off a dry leaflet and handed me a stem with three leaflets irregularly disposed of it.

"Now leave a blank page in your book. That will help me remember the order in which they come."

NEXT came a flat insect, which, strangely enough, had two legs missing on one side. However, Benda was moving so fast that I had to put it away without comment. He kept darting about and handing me twigs of leaves, little sticks, pieces of bark, insects, not seeming to care much whether they were complete or not; grass-blades, several dagger-shaped locust thorns, cross-sections of curious fruits, moving so rapidly that in a few moments my notebook bulged widely, and I had to warm him that its hundred leaves were almost filled.

"Well, that ought to be enough," he said with a sigh after his lively exertion. "You don't know how I'll appreciate your indulging my foolish little whim."

"Say!" I exclaimed. "Ask some-

thing of me. This is nothing. I'll take it right over to the Botany Department, and in a few days you ought to have a list of names fit for a Bolshevik."

"One important caution," he said. "If you disturb their order in the book, or even the position on the page, the names you send me will mean nothing to me. Not that it will be any great loss," he added whimsically. "I suppose I've become a sort of fan on this, like the business men who claim that their office work interferes with their golf."

We walked leisurely back toward the big dormitory. It was while we were crossing a street that Benda stumbled, and, to dodge a passing truck, had to catch my arm, and fell against me. I heard his soft voice whisper in my ear:

"Get out of this town as soon as you can!"

I looked at him in startled amazement, but he was walking along, shaking himself from his stumble, and looking up and down the street for passing trucks.

"As I was saying," he said in a matter-of-fact voice, "we expect to reach the one-and-one-quarter million mark this month. I never saw a place grow so fast."

I FELT a great leap of sudden understanding. For a moment my muscles tightened, but I took my cue.

"Remarkable place," I said calmly; "one reads a lot of half-truths about it. Too bad I can't stay any longer."

"Sorry you have to leave," he said, in exactly the right tone of voice. "But you can come again."

How thankful I was for the forty years of playing and working together that had accustomed us to that sort of team-work! Unconsciously we responded to one another's cues. Once our ability to "play together" had saved my life. It was when we were in college and were out on a cross-country hike together; Benda suddenly caught my hand and swung it upward. I recognized the gesture; we were cheerleaders and worked together at football games, and we had one stunt in which we swung our hands over our heads, jumped about three feet, and let out a whoop. This was the "stunt" that he started out there in the country, where we were by ourselves. Automatically, without thinking, I swung my arms and leaped with him and yelled. Only later did I notice the rattlesnake over which I had jumped. I had not seen that I was about to walk right into it, and he had noticed it too late to explain. A flash of genius suggested the cheering stunt to him.

"*Communication* is a science!" he had said, and that was all the comment there was on the incident.

So now, I followed my cue, without knowing why, nor what it was all about, but confident that I should soon find out. By noon I was on the bus, on my way through the pass, to meet the vehicle from Washington. As the bus swung along, a number of things kept jumbling through my mind: Benda's effusive glee at seeing me, and his sudden turning and bundling me off in a nervous hurry without a word of explanation; his lined and worried face and yet his insistence on the joys of his work in The Science Community; his obvious desire to be hospitable and play the good host, and yet his evasiveness and unwillingness to chat intimately and discuss important thing as he used to. Finally, that notebook full of odd specimens bulging in my pocket. And the memory of his words as he shook hands with me when I was stepping into the bus:

"Long live the science of communication!" he had said. Otherwise, he was rather glum and silent.

I TOOK out the book of specimens and looked at it. His caution not to disturb the order and position of things rang in my ears. The Science of Communication! Two and two were beginning to make four in my mind. All the way on the train from Wash-

ington to New York I could hardly keep my hands off the book. I had definitely abandoned the idea of hunting up botanists and zoologists at Columbia. Benda was not interested in the names of these things. That book meant something else. Some message. The Science of Communication!

That suddenly explained all the contradictions in his behavior. He was being closely watched. Any attempt to tell me the things he wanted to say would be promptly recognized. He had succeeded brilliantly in getting a message to me. Now, my part was to read it. I felt a sudden sinking within me. That book full of leaves, bugs, and sticks? How could I make anything out of it?

"There's the Secret Service," I thought. "They are skilled in reading hidden messages. It must be an important one, worthy of the efforts of the Secret Service, or he would not have been at such pains to get it to me—

"But no. The Secret Service is skilled at reading hidden messages, but not as skilled as I am in reading my friend's mind. Knowing Benda, his clear intellect, his logical methods, will be of more service in solving this than all the experts of the Secret Service."

I barely stopped to eat dinner when I reached home. I hurried to the laboratory building, and laid out the specimens on white sheets of paper, meticulously preserving order, position, and spacing. To be on the safe side I had them photographed, asking the photographer to vary the scale of his pictures so that all of the final figures would be approximately the same size. Plate I. shows what I had.

I WAS all a-tremble when the mounted photographs were handed to me. The first thing I did was to number the specimens, giving each blank space also its consecutive number. Certainly no one could imagine a more meaningless jumble of twigs, leaves, berries, and bugs. How could I read any message out of that?

Yet I had no doubt that the message concerned something of far more importance than Benda's own safety. He had moved in this matter with astonishing skill and breathless caution; yet I knew him to be reckless to the extreme where only his own skill was concerned. I couldn't even imagine his going to this elaborate risk merely on account of Smith and Francisco. Something bigger must be involved.

I stared at the rows of specimens.

"Communication is a science!" Benda had said, and it came back to me as I studied the bent worms and the beetles with two legs missing. I was confident that the solution would be simple. Once the key idea occurred to me I knew I should find the whole thing astonishingly direct and systematic. For a moment I tried to attach some sort of heiroglyphic significance to the specimen forms; in the writing of the American Indians, a wavy line meant water, an inverted V meant a wigwam. But, I discarded that idea in a moment. Benda's mind did not work along the paths of symbolism. It would have to be something mathematical, rigidly logical, leaving no room for guesswork.

No sooner had the key-idea occurred to me than the basic conception underlying all these rows of twigs and bugs suddenly flashed into clear meaning before me. The simplicity of it took my breath away.

"I knew it!" I said aloud, though I was alone. "Very simple."

I was prepared for the fact that each one of the specimens represented a letter of the alphabet. If nothing else, their number indicated that. Now I could see, so clearly that the photographs shouted at me, that each specimen consisted of an upright stem, and from this middle stem projected side-arms to the right and to the left, and in various vertical locations on each side.

The middle upright stem contained

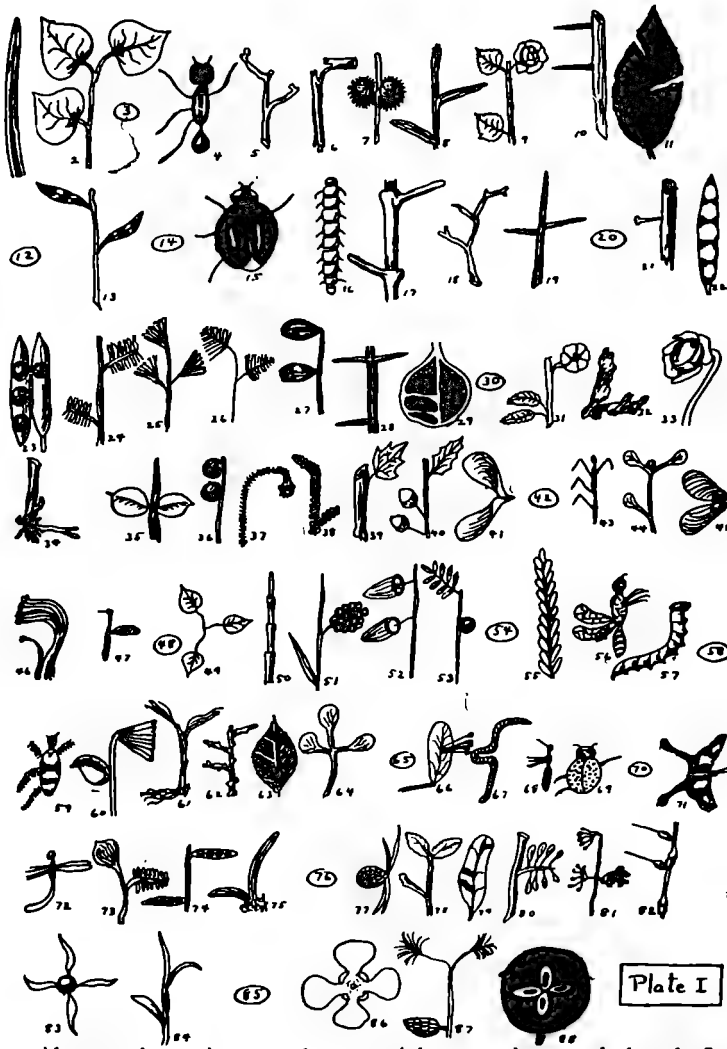


Plate I

these side-arms in various numbers and combinations. In five minutes I had a copy of the message, translated into its fundamental characters, as shown on Plate II.

The first grass-blade was the simple, upright stem; the second, three leaflets on their stem, represented the upright portion with two arms to the left at the top and middle, and one arm to the right at the top; and so on.

That brought the message down to

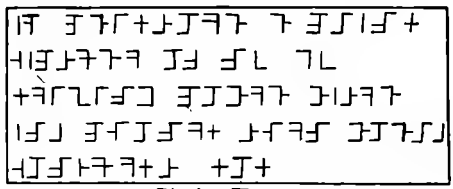


Plate II

the simple and straightforward matter of a substitution cipher. I was confident that Benda had no object in introducing any complications that could possibly be avoided, as his sole purpose was to get to me the most readable message without getting caught at it. I recollected now how cautious he had been to hand me no paper, and how openly and obviously he had dropped each specimen into my book; because he knew someone was watching him and expecting him to slip in a message. He had, as I could see now in the retrospect, been conspicuously careful that nothing suspicious should pass from his hands to mine.

Substitution ciphers are easy to solve, especially for those having some experience. The method can be found in Edgar Allen Poe's "Gold Bug" and in a host of its imitators. A Secret Service cipher man could have read it in an hour. But I knew my friend's mind well enough to find a short-cut. I knew just how he would go about devising such a cipher, in fact, how

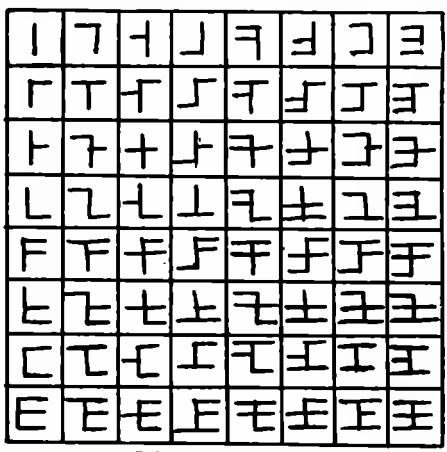


Plate III

ninety-nine persons out of a hundred with a scientific education would do it.

If we begin adding horizontal arms to the middle stem, from top to bottom and from left to right, the possible characters can be worked out by the system shown on Plate III.

It is most logical to suppose that Benda would begin with the first sign and substitute the letters of the alphabet in order. That would give us the cipher code shown on Plate IV.

It was all very quick work, just as I had anticipated, once the key-idea had occurred to me. The ease and speed of

my method far exceeded that of Poe's method, but, of course, was applicable only to this particular case. Substituting letters for signs out of my diagram, I got the following message:

AM PRISONER R PLANS CAPTURE OF N Y BY SEIZING POWER WATER AND PHONES THEN WORLD CONQUEST S O S

I am not an adventure-loving man. Though a cordon of husky marines about me was a protection against any possible danger, yet, stealing along through that wild valley in the Virginia mountains toward the dark masses of that fanatic city, the silent progress of the long, dark line through the night, their mysterious disappearance, one by one, as we neared the

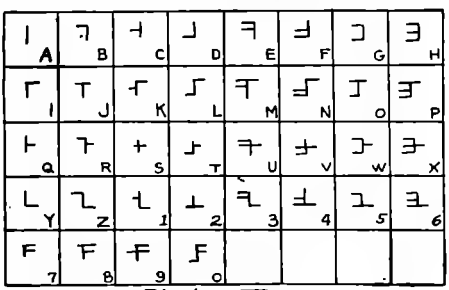


Plate IV

PART IV

L'Envoi

(By Peter Hagstrom, M.D.)

MY solution of the message practically ends the story. Events followed each other from then on like bullets from a machine-gun. A wild drive in a taxicab brought me to the door of Mayor Anderson at ten o'clock that night. I told him the story and showed him my photographs.

Following that I spent many hours telling my story to and consulting with officers in the War Department. Next afternoon, photographic maps of the Science Community and its environs, brought by airplanes during the forenoon, were spread on desks before us. A colonel of marines and a colonel of aviation sketched plans in notebooks. After dark I sat in a transport plane with muffled exhaust and propellers, slipping through the air as silently as a hawk. About us were a dozen bombing planes, and about fifty transports, carrying a battalion of marines.

city, the creepy, hair-raising journey through the dark streets—I shall never forget for the rest of my life the sinking feeling in my abdomen and the throbbing in my head. But I wanted to be there, for Benda was my lifelong friend.

I guided them to Rohan's rooms, and saw a dozen dark forms slip in, one by one. Then we went on to the dormitory where Benda lived. Benda answered our hammering at his door in his pajamas. He took in the Captain's automatic, and the bayonets behind me, at a glance.

"Good boy, Hagstrom!" he said. "I knew you'd do it. There wasn't much time left. I got my instructions about handling the New York telephone system to-day."

As we came out into the street, I saw Rohan handcuffed to two big marines, and rows of bayonets gleaming in the darkness down the streets. Every few moments a bright flare shot out from the planes in the sky, until a squad located the power-house and turned on all the lights they could find.

Jetta of the Lowlands

BEGINNING A THREE-PART NOVEL

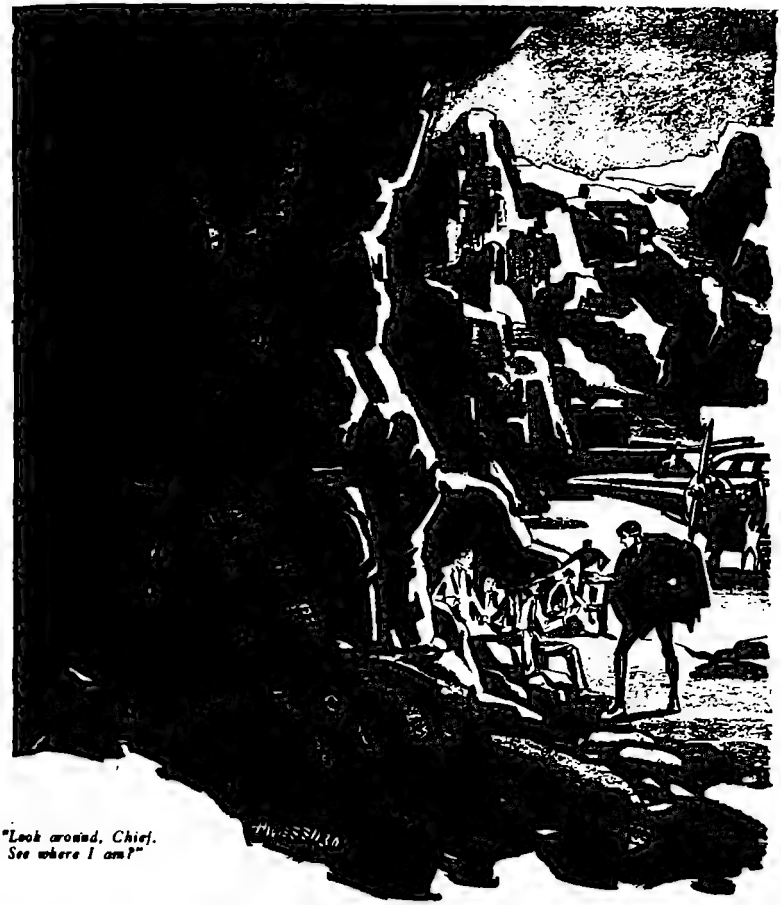
By Ray Cummings

Foreword

HAVE you ever stood on the seashore, with the breakers rolling at your feet, and imagined what the scene would be like if the ocean water were gone? I have had a vision of that many times. Standing on the Atlantic Coast, gazing out toward Spain, I can envisage myself, not down at the sea-level, but upon the brink of a height. Spain and the coast of Europe, off there upon another height.

And the depths between? Unreal landscape! Mysterious realm which now we call the bottom of the sea! Worn and rounded crags; bloated mud-plains; noisome reaches of ooze which once

Fantastic and sinister are the Lowlands into which Philip Grant descends on his dangerous assignment.



"Look around, Chief. See where I am?"

were the cold and dark and silent ocean floor, caked and drying in the sun. And off to the south the little fairy mountain tops of the West Indies rearing their verdured crowns aloft.

If the ocean water were gone! Can you picture it? A new world, greater in area than all the land we now have. They would call the former sea-level the zero-height, perhaps. The depths would go down as far beneath it as Mount Everest towers above it. Aeroplanes would fly down into them.

And I can imagine the settlement of these vast new realms. New little nations being created, born of man's indomitable will to conquer every adverse condition of inhospitable nature.

A novel setting for a story of adventure. It seems so to me. Can you say that the oceans will never drain of their water? That an earthquake will not open a rift—some day in the future—and lower the water into subterranean caverns? The volume of water of all the oceans is no more to the volume of the earth than a tissue paper wrapping on an orange.

Is it too great a fantasy? Why, reading the facts of what happened in 1929, it is already prognosticated. The fishing banks off the Coast of Newfoundland have suddenly sunk... Cable ships repairing a broken cable, snapped by the earthquake of November 18th, 1929, report that for distances of a hundred miles on the Grand Banks the cables have disappeared into unfathomable depths. And before the subterranean cataclysm, they were within six hundred feet of the surface. And all the bottom of that section of the North Atlantic seems to have caved in. Ten thousand square miles dropped out of the bottom of the ocean! Fact, not fancy.

And so let us enlarge the picture. Let us create the Lowlands—twenty thousand feet below the zero-height—the setting for a tale of adventure. The romance of the mist-shrouded deeps. And the romance of little Jetta.

CHAPTER I

The Secret Mission

I WAS twenty-five years of age that May evening of 2020 when they sent me south into the Lowlands. I had been in the National Detective Service Bureau, and then was transferred to the Customs Department, Atlantic Lowlands Branch. I went alone; it was best, my commander thought. An assignment needing diplomacy rather than a show of force.

It was 9 P. M. when I catapulted from the little stage of Long Island airport. A fair, moonlit evening—a moon just beyond the full, rising to pale the eastern stars. I climbed about a thousand feet, swung over the headlands of the Hook, and, keeping in the thousand-foot local lane, took my course.

My destination lay some thirteen hundred miles southeast of Great New York. I could do a good normal three-ninety in this fleet little Wasp, especially if I kept in the rarer air-pressures over the zero-height. The thousand-foot lane had a southward drift, this night. I was making now well over four hundred; I would reach Nareda soon after midnight.

The Continental Shelf slid beneath me, dropping away as my course took me further from the Highland borders. The Lowlands lay patched with inky shadows and splashes of moonlight. Domes with upstanding, rounded heads; plateaus of naked black rock, ten thousand feet below the zero-height; trenches, like valleys, ridged and pitted, naked in places like a pock-marked lunar landscape. Or again, a pall of black mist would shroud it all, dark curtain of sluggish cloud with moonlight tinging its edges pallid green.

To my left, eastward toward the great basin of the mid-Atlantic Lowlands, there was always a steady downward slope. To the right, it came up over the continental shelf to the Highlands of the United States.

There was often water to be seen in these Lowlands. A spring-fed lake far down in a caldron pit, spilling into a trench; low-lying, land-locked little seas; cañons, some of them dry, others filled with tumultuous flowing water. Or great gashes with water sluggishly flowing, or standing with a heavy slime, and a pall of uprising vapor in the heat of the night.

At 37° N. and 70° W., I passed over the newly named Atlas Sea. A lake of water here, more than a hundred miles in extent. Its surface lay fifteen thousand feet below the zero-height; its depth in places was a full three thousand. It was clear of mist tonight. The moonlight shimmered on its rippled surface, like pictures my father had often shown me of the former oceans.

I passed, a little later, well to the westward of the verdured mountain top of the Bermudas.

There was nothing of this flight novel to me. I had frequently flown over the Lowlands; I had descended

into them many times. But never upon such a mission as was taking me there now.

I was headed for Nareda, capital village of the tiny Lowland Republic of Nareda, which only five years ago came into national being as a protectorate of the United States. Its territory lies just north of the mountain Highlands of Haiti, Santo Domingo and Porto Rico. A few hundred miles of tumbled Lowlands, embracing the turgid Nares Sea, whose bottom is the lowest point of all the Western Hemisphere —some thirty thousand feet below the zero-height.

The village of Nareda is far down indeed. I had never been there. My charts showed it on the southern border of the Nares Sea, at minus twenty thousand feet, with the Mona Valley behind it like a gash in the steep upward slopes to the Highlands of Porto Rico and Haiti.

Nareda has a mixed population of typical Lowland adventurers, among which the hardy Dutch predominate; and Holland and the United States have combined their influence in the World Court to give it national identity.

AND out of this had arisen my mission now. Mercury—the quicksilver of commerce—so recently come to tremendous value through its universal use in the new antiseptics which bid fair to check all human disease—was being produced in Nareda. The import duty into the United States was being paid openly enough. But nevertheless Hanley's agents believed that smuggling was taking place.

It was to investigate this condition that Hanley was sending me. I had introduction to the Nareda government officials. I was to consult with Hanley by ether-phone in seeking the hidden source of the contraband quicksilver, but, in the main, to use my own judgment.

A mission of diplomacy. I had no mind to pry openly among the people of these Lowland depths, looking for smugglers. I might, indeed, find them too unexpectedly! Over-curious strangers are not welcomed by the Lowlanders. Many have gone into the depths and have never returned. . . .

I was above the Nares Sea, by midnight. I was still flying a thousand feet over the zero-height. Twenty-one thousand feet below me lay the black expanse of water. The moon had climbed well toward the zenith, now. Its silver shafts penetrated the hanging mist-stratas. The surface of the Nares Sea was visible—dark and sullen looking.

I shifted the angles of incidence of the wings, re-set my propeller angles and made the necessary carburetor adjustments, switching on the supercharger which would supply air at normal zero-height pressure to the carburetors throughout my descent.

I swung over Nareda. The lights of the little village, far down, dwarfed by distance, showed like bleary, winking eyes through the mists. The jagged recesses of the Mona valley were dark with shadow. The Nares Sea lay like some black monster asleep, and slowly, heavily panting. Moonlight was over me, with stars and fleecy white clouds. Calm, placid, atmospheric night was up here. But beneath, it all seemed so mysterious, fantastic, sinister.

My heart was pounding as I put the Wasp into a spiral and forced my way down.

CHAPTER II

The Face at the Window

WITH heavy, sluggish engines I panted down and came to rest in the dull yellow glow of the field lights. A new world here. The field was flat, caked ooze, cracked and hardened. It sloped upward from the shore toward where, a quarter of a mile away, I could see the dull lights of the settlement, blurred by the gathered night vapors.

The field operator shut off his permission signal and came forward. He was a squat, heavy-set fellow in wide trousers and soiled white shirt flung open at his thick throat. The sweat streamed from his forehead. This oppressive heat! I had discarded my flying garb in the descent. I wore a shirt, knee-length pants, with hose and wide-soled shoes of the newly fashioned Lowland design. What few weapons I dared carry were carefully concealed. No alien could enter Nareda bearing anything resembling a lethal weapon.

My wide, thick-soled shoes did not look suspicious for one who planned much walking on the caked Lowland ooze. But those fat soles were cleverly fashioned to hide a long, keen knife-blade, like a dirk. I could lift a foot and get the knife out of its hidden compartment with fair speed. This I had in one shoe.

In the other, was the small mechanism of a radio safety recorder and image finder, with its attendant individual audiophone transmitter and receiver. A miracle of smallness, these tiny contrivances. With batteries, wires and girds, the whole device could lay in the palm of one's hand. Once past this field inspection I would rig it for use under my shirt, strapped around my chest. And I had some colored magnesium flares.

THE field operator came panting. "Who are you?"

"Philip Grant. From Great New York." I showed him my name etched on my forearm. He and his fellows searched me, but I got by.

"You have no documents?"

"No."

My letter to the President of Nareda was written with invisible ink upon the fabric of my shirt. If he had heated it to a temperature of 180°F. or so, and blown the fumes of hydrochloric acid upon it, the writing would have come out plain enough.

I said, "You'll house and care for my machine?"

They would care for it. They told me the price—swindlingly exorbitant for the unwary traveller who might wander down here.

"All correct," I said cheerfully. "And half that much more for you and your men if you give me good service. Where can I have a room and meals?"

"Spawn," said the operator. "He is the best. Fat-bellied from his own good cooking. Take him there, Hugo."

I had a gold coin instantly ready; and with a few additional directions regarding my flyer, I started off.

It had been hot and oppressive standing in the field; it was infinitely worse climbing the mud-slope into the village; but my carrier, trudging in advance of me along the dark, winding path up the slope, shouldered my bag and seemed not to notice the effort. We passed occasional tube-lights strung on poles. They illumined the heavy rounded crags. A tumbled region, this slope which once was the ocean floor twenty thousand feet below the surface. Rifts were here like gulleys; little buttes reared their rounded, dome heads. And there were caves and crevices in which deep sea fish once had lurked.

FOR ten minutes or so we climbed. It was past the midnight hour; the village was asleep. We entered its outposts. The houses were small structures of clay. In the gloom they looked like drab little beehives set in unplanned groups, with paths for streets wandering between them.

Then we came to a more prosperous neighborhood. The street widened and straightened. The clay houses, still with rounded domelike tops, stood back from the road, with wooden front fences, and gardens and shrubbery. The windows and doors were like round finger-holes plugged in the clay by a giant hand. Occasionally the windows, dimly lighted, stared like sleeping giant eyes.

There were flowers in all the more pretentious private gardens. Their

perfume, hanging in the heavy night air, lay on the village, making one forget the over-curtain of stenching mist. Down by the shore of the Nares Sea, this world of the depths had seemed darkly sinister. But in the village now, I felt it less ominous. The scent of the flowers, the street lined in one place by arching giant fronds drowsing and nodding overhead — there seemed a strange exotic romance to it. The sultry air might almost have been sensuous.

"Much further, Hugo?"

"No. We are here."

He turned abruptly into a gateway, led me through a garden and to the doorway of a large, rambling, one-story building. The news of my coming had preceded me. A front room was lighted; my host was waiting.

Hugo set down my bag, accepted another gold coin; and with a queer sidelong smile, the incentive for which I had not the slightest idea, he vanished. I fronted my host, this Jacob Spawn. Strange fate that should have led me to Spawn! And to little Jetta!

SPAWN was a fat-bellied Dutchman, as the field attendant had said. A fellow of perhaps fifty-five, with sparse gray hair and a heavy-jowled, smooth-shaved face from which his small eyes peered stolidly at me. He laid aside a huge, old-fashioned calabash pipe and offered a pudgy hand.

"Welcome, young man, to Nareda. Seldom do we see strangers."

The meal which he presently cooked and served me himself was lavishly done. He spoke good English, but slowly, heavily, with the guttural intonation of his race. He sat across the table from me, puffing his pipe while I ate.

"What brings you here, young lad? A week, you say?"

"Or more. I don't know. I'm looking for oil. There should be petroleum beneath these rocks."

For an hour I avoided his prying questions. His little eyes roved me, and I knew he was no fool, this Dutchman, for all his heavy, stolid look.

We remained in his kitchen. Save for its mud walls, its concave, dome-roof, it might have been a cookery of the Highlands. There was a table with its tube-light; the chairs; his electron stove; his orderly rows of pots and pans and dishes on a broad shelf.

I recall that it seemed to me a woman's hand must be here. But I saw no woman. No one, indeed, beside Spawn himself seemed to live here. He was reticent of his own business, however much he wanted to pry into mine.

I had felt convinced that we were alone. But suddenly I realized it was not so. The kitchen adjoined an interior back-garden. I could see it through the opened door oval—a dim space of flowers; a little path to a pergola; an adobe fountain. It was a sort of Spanish patio out there, partially enclosed by the wings of the house. Moonlight was struggling into it. And, as I gazed idly, I thought I saw a figure lurking. Someone watching us.

WAS it a boy, observing us from the shadowed moonlit garden? I thought so. A slight, half grown boy. I saw his figure—in short ragged trousers and a shirt-blouse—made visible in a patch of moonlight as he moved away and entered the dark opposite wing of the house.

I did not see the boy's figure again; and presently I suggested that I retire. Spawn had already shown me by bedroom. It was in another wing of the house. It had a window facing the front; and a window and door back to this same patio. And a door to the house corridor.

"Sleep well, Meester Grant." My bag was here on the table under an electrolier. "Shall I call you?"

"Yes," I said. "Early."

He lingered a moment. I was opening my bag. I flung it wide under his gaze.

"Well, good night. I shall be very comfortable, thanks."

"Good night," he said.

He went out the patio door. I watched his figure cross the moonlit path and enter the kitchen. The noise of his puttering there sounded for a time. Then the light went out and the house and garden fell into silence.

I closed my doors. They sealed on the inside, and I fastened them securely. Then I fastened the transparent window panes. I did not undress, but lay on the bed in the dark. I was tired; I realized it now. But sleep would not come.

I am no believer in occultism, but there are premonitions which one cannot deny. It seemed now as I lay there in the dark that I had every reason to be perturbed, yet I could not think why. Perhaps it was because I had been lying to this innkeeper stoutly for an hour past, and whether he believed me or not for the life of me I could not now determine.

I SAT up on the bed, presently, and adjusted the wires and diaphragms of the ether-wave mechanism. When in place it was all concealed under my shirt. As I switched it on, the electrodes against my flesh tingled a little. But it was absolutely soundless, and one gets used to the tingle. I decided to call Hanley.

The New York wave-sorter handled me promptly, but Hanley's office was dead.

As I sat there in the darkness, annoyed at this, a slight noise forced itself on me. A scratching—a tap—something outside my window.

Spawn, come back to peer in at me?

I slipped noiselessly from the bed. The sound had come from the window which faced the patio. The room, over by the bed, was wholly dark. The moonlight outside showed the patio window as a dimly illumined oval.

For a moment I crouched on the floor by the bed. No sound. The silence of the Lowlands is as heavy and oppressive as its air. I felt as though my heart were audible.

I lifted my foot; extracted my dirk. It opened into a very businesslike steel blade of a good twelve-inch length. I bared the blade. The click of it leaving the flat, hollow handle sounded loud in the stillness of the room.

A moment. Then it seemed that outside my window a shadow had moved. I crept along the floor. Rose up suddenly at the window.

And stared at a face peering in at me. A small face, framed by short, clustering, dark curls.

A girl!

CHAPTER III

In a Moonlit Garden

SHE drew back from the window like a startled fawn; timorous, yet curious, too, for she ran only a few steps, then turned and stood peering. The moonlight slanted over the western roof of the building and fell on her. A slight, boyish figure in short, tattered trousers and a boy's shirt, open at her slim, rounded throat. The moonlight gleamed on the white shirt fabric to show it torn and ragged. Her arms were upraised; her head, with clustering, flying dark curls, was tilted as though listening for a sound from me. A shy, wild creature. Drawn to my window; tapping to awaken me, then frightened at what she had done.

I opened the garden door. She did not move. I thought she would run, but she did not. The moonlight was on me as I stood there. I was conscious of its etching me with its silver sheen. And twenty feet from me this girl stood and gazed, with startled eyes and parted lips—and white limbs trembling like a frightened animal.

The patio was very silent. The heavy arching fronds stirred slightly with a vague night breeze; the moonlight threw a lacy dark pattern of them on the ray stone path. The fountain bowl gleamed white in the moonlight behind the girl, and in the silence I could hear the low splashing of the water.

A magic moment. Unforgettable. It comes to some of us just once, but to all of us it comes. I stood with its spell upon me. Then I heard my voice, tense but softly raised.

"Who are you?"

It frightened her. She retreated until the fountain was between us. And as I took a step forward, she retreated further, noiseless, with her bare feet treading the smooth stones of the path.

I RAN and caught her at the doorway of the flowered pergola. She stood trembling as I seized her arms. But the timorous smile remained, and her eyes, upraised to mine, glowed with misty starlight.

"Who are you?"

This time she answered me. "I am called Jetta."

It seemed that from her white forearm within my grasp a magic current swept from her to me and back again. We humans, for all our clamoring, boasting intellectuality, are no more than puppets in Nature's hands.

"Are you Spawn's daughter?"

"Yes."

"I saw you a while ago, when I was having my meal."

"Yes—I was watching you."

"I thought you were a boy."

"Yes. My father told me to keep away. I wanted to meet you, so I came to wake you up."

"He may be watching us now."

"No. He is sleeping. Listen—you can hear him snore."

I could, indeed. The silence of the garden was broken now by a distant, choking snore.

We both laughed. She sat on the little mossy seat in the pergola doorway. And on the side away from the snore. (I had the wit to be sure of that.)

"I wanted to meet you," she repeated. "Was it too bold?"

I THINK that what we said, sitting there with the slanting moonlight on us, could not have amounted to much. Yet for us, it was so important! Vital. Building memories which I knew—and I think that she knew, even then—we would never forget.

"I will be here a week, Jetta."

"I want—I want very much to know you. I want you to tell me about the world of the Highlands. I have a few books. I can't read very well, but I can look at the pictures."

"Oh, I see—"

"A traveler gave them to me. I've got them hidden. But he was an old man: all men seem to be old—except those in the pictures, and you, Philip."

I laughed. "Well, that's too bad. I'm mighty glad I'm young."

Ah, in that moment, with blessed youth surging in my veins, I was glad indeed!

"Young. I don't remember ever seeing anyone like you. The man I am to marry is not like you. He is old, like father—"

I drew back from her, startled.

"Marry?"

"Yes. When I am seventeen. The law of Nareda—your Highland law, too, father says—will not let a girl be married until she is that age. In a month I am seventeen."

"Oh!" And I stammered, "But why are you going to marry?"

"Because father tells me to. And then I shall have fine clothes: it is promised me. And go to live in the Highlands, perhaps. And see things; and be a woman, not a ragged boy forbidden to show myself; and—"

I WAS barely touching her. It seemed as though something—some vision of happiness which had been given me—were fading, were being snatched away. I was conscious of my hand moving to touch hers.

"Why do you marry—unless you're in love? Are you?

Her gaze like a child came up to meet mine. "I never thought much about that. I have tried not to. It frightened me—until to-night."

She pushed me gently away. "Don't.

Let's not talk of him. I'd rather not."

"But why are you dressed as a boy?"

I gazed at her slim but rounded figure in tattered boy's garb—but the woman's lines were unmistakable. And her face, with clustering curls. Gentle girlhood. A face of dark, wild beauty.

"My father hates women. He says they are all bad. It is a sin to wear woman's finery; or it breeds sin in women. Let's not talk of that. Philip, tell me—oh, if you could only realize all the things I want to know. In Great New York, there are theatres and music?"

"Yes," I said. And began telling her about them.

The witching of this moonlit garden! But the moon had presently sunk, and to the east the stars were fading.

"Philip! Look! Why, it's dawn already. I've got to leave you."

I held her just a moment by the hand.

"May I meet you here to-morrow night?" I asked.

"Yes," she said simply.

"Good night—Jetta."

"Good night. You—you've made me very happy."

She was gone, into a doorway of the opposite wing. The silent, empty garden sounded with the distant, reassuring snores of the still sleeping Spawn.

I went back to my room and lay on my bed. And drifted off on a sea of magic memories. The world—my world before this night—now seemed to have been so drab. Empty. Lifeless. But now there was pulsing, living magic in it for me.

I drifted into sleep, thinking of it.

CHAPTER IV

The Mine in the Cauldron Depths

I WAS awakened by the tinkling, buzzing call of the radio-diaphragm beneath my shirt. I had left the call open.

It was Hanley. I lay down, eyeing my window which now was illumined by the flat light of dawn.

Hanley's microscopic voice:

"Phil? I've just raised President Markes, there in Nareda. I've been a bit worried about you."

"I'm all right, Chief."

"Well, you'd better see President Markes this morning."

"That was my intention."

"Tell him frankly what you're after. This smuggling of quicksilver from Nareda has got to stop. But take it easy, Phil; don't be reckless. Remember: one little knife thrust and I've lost a good man!"

I laughed at his anxious tone. That was always Hanley's way. A devil himself, when he was on a trail, but always worried for fear one of his men would come to harm.

"Right enough, Chief. I'll be careful."

He cut off presently.

I did not see Jetta that morning. I told Spawn I was hoping to see President Markes on my petroleum proposition. And at the proper hour I took myself to the government house.

THIS Lowland village by daylight seemed even more fantastic than shrouded in the shadows of night. The morning sun had dissipated the overhead mists. It was hot in the rocky streets under the weird overhanging vegetation. The settlement was quietly busy with its tropical activities. There were a few local shops; vehicles with the Highland domestic animals—horses and oxen—panting in the heat; an occasional electro-automatic car.

But there were not many evidences of modernity here. The street and house tube-lights. A few radio image-finders on the house-tops. An automatic escalator bringing ore from a nearby mine past the government checkers to an aero-stage for northern transportation. Cultivated fields in the village outskirts operated with modern machinery.

But beyond that, it seemed primitive. Two hundred years back. Street vendors. People in primitive, ragged,

tropical garb. Half naked children. I was stared at curiously. An augmenting group of children followed me as I went down the street.

The President admitted me at once. In his airy office, with safeguards against eavesdropping, I found him at his desk with a bank of modern instruments before him.

"Sit down, Grant."

HE was a heavy-set, flabby man of sixty-odd, this Lowland President. White hair; and an old-fashioned, rolling white mustache of the sort lately come into South America fashion. He sat with a glass of iced drink at his side. His uniform was stiffly white, and ornate with heavy gold braid, but his neckpiece was wilted with perspiration.

"Damnable heat, Grant."

"Yes, Sir President."

"Have a drink." He swung a tinkling glass before me. "Now then, tell me what is your trouble. Smuggling, here in Nareda. I don't believe it." His eyes, incongruously alert with all the rest of him so fat and lazy, twinkled at me. "We of the Nareda Government watch our quicksilver production very closely. The government fee is a third."

I might say that the Nareda government collected a third on all the mineral and agricultural products of the country, in exchange for the necessary government concessions. Markes exported this share openly to the world markets, paying the duty exactly like a private corporation.

He added, "You think — Hanley thinks—the smuggling is on too large a scale to be any illicit producer?"

I nodded.

"Then," he said, "it must be one of our recognized mines."

"Hanley thinks it is a recognized mine, falsifying its production record," I explained.

"If that is so, I will discover it," he said. He spoke with enthusiasm and vigor. "For you I shall treat as what you are—the representative of our most friendly government. The figures of our quicksilver production I shall lay before you in just a few days. Let me fill up your glass, Grant."

THE lazy tropics. I really did not doubt his sincerity. But I did doubt his ability to cope with any clever criminal. His enthusiasm for action would wilt like his neckpiece, in Nareda's heat. Unless, perhaps, the knowledge that the smuggler was cheating him as well as the United States—*that* might spur him.

He added—and now I got a shock wholly unexpected: "If we think that some recognized producer of quicksilver here is cheating us, it should not be difficult to check up on it. Nareda has only one large cinnabar lode being worked. A private individual: that fellow Jacob Spawn—"

"Spawn?" I exclaimed involuntarily.

"Why, yes. Did not he mention it? His mine is no more than ten kilometers from here—back on the southern slope."

"He didn't mention it," I said.

"So? That is strange; but he is a secretive Dutchman by nature. He specializes in prying into the other fellow's affairs. Hm-m."

He fell into a reverie while I stared at him. Spawn, the big—the only big—quicksilver producer here!

THE President interrupted my startled thoughts. "I hope you did not intimate your real purpose?"

"No."

We both turned at the sound of an opening door. Markes called, "Ah, come in Perona! Are you alone? Good! Close that slide. Here is Chief Hanley's representative." He introduced us all in a breath. "This is interesting, Perona. Damnably interesting. We're being cheated, what? It looks that way. Sit down, Perona."

This was Greko Perona, Nareda's Minister of Internal Affairs. Spawn had mentioned him to me. A South

American. A man in his fifties. Thin and darkly saturnine, with iron-gray hair, carefully plastered to cover his half-bald head. He sat listening to the President's harangue, twirling the upturned waxen ends of his artificially black mustache. A wave of perfume enveloped him. A ladies' courtier, this Perona by the look of him. His white uniform was immaculate, carefully tailored and carefully worn to set off at its best his still trim and erect figure.

"Well," he said, when at last the President paused, "of a surety something must be done."

Perona seemed not excited, rather more carefully watchful, of his own words, and of me. His small dark eyes roved me.

"What is it you would plan to do about it, Señorito?"

An irony was in that Latin diminutive! He spread his pale hands. "Your United States officials perhaps exaggerate. I am very doubtful if we have smugglers here in Nareda."

"Unless it is Spawn," the President interjected.

PERONA frowned slightly. But his suave manner remained. "Spawn? Why Spawn?"

"You need not take offense, Perona," Markes retorted. "We are discussing this before an envoy of the United States, sent here to consult with us. We have nothing to hide."

Markes turned to me. And his next words were like a bomb exploding at my feet.

"Perona *is* offended, Grant. But I promise you, his natural personal prejudice will not affect my investigation. Of course he is prejudiced, since he is to marry Spawn's daughter, the little Jetta."

I started involuntarily. This pomaded old dotard! This perfumed, ancient dandy!

For all the importance of my mission in Nareda, my thoughts had been subconsciously more upon Jetta—far more—than upon smugglers of quicksilver. This palsied popinjay! This, the reality of the specter which had been between Jetta and me during all that magic time in the moonlit garden!

This suave old rake! Betrothed to that woodland pixie whose hand I had held and to whom I had sung love songs in the magic flower-scented moonlight only a few hours ago! And whom I had promised to meet there again to-night!

This, then, was my rival!

NOTHING of importance transpired during the remainder of that interview. Markes reiterated his intention of making a complete governmental investigation at once. To which Perona suavely assented.

"*Por Dios Señorito,*" he said to me, "we would not have your great government annoyed at Nareda. If there are smugglers, we will capture them of a certainty."

From the Government House, it now being almost time for the midday meal, I returned to Spawn's.

The rambling mud walls of the Inn stood baking in the noonday heat when I arrived. The outer garden drowsed; there seemed no one about. I went through the main door oval into the front public room, where first I had met Spawn. He was not here now, nor was Jetta.

A sudden furtiveness fell upon me. With noiseless steps I went the length of the dim, padded interior corridor to my own room. My belongings seemed undisturbed; a vague idea that Spawn might have seized this opportunity to ransack them had come to me. But it seemed not; though if he had he would have found nothing.

I stood for a moment listening at my patio window. I could see the kitchen from here; there was no one in it. I started back for the living room. That furtive instinct was still on me. I made no noise. And abruptly I heard Spawn's voice, floating out softly in the hushed silence of the house.

"So, Perona?"

A BRIEF silence, in which it seemed that I could hear a tiny aerial answer. Then Spawn again. A startled oath.

"De duvel! You say—?"

I stood frozen, listening.

"She is here. Yes, I will keep her close. I am no fool, Perona."

Spawn's laugh was like a growl. "Later to-day, yes. Fear not! I am no fool. I will be careful of it."

Spawn, talking by private audiphone, to Perona. The colloquy came to an abrupt end.

". . . Might eavesdrop? By hell, you are right!"

I heard the click as Spawn and Perona broke connection. Spawn came from his room. But he was not quick enough. I slipped away before he saw me. In the living room I had time to be calmly seated with a lighted cigarette. His approaching heavy footsteps sounded. He came in.

"Oh—Grant."

"Good noon, friend Spawn. I'm hungry." I grinned at him. "I understand my bargain with you included a noonday meal. Does it?"

He eyed me suspiciously. "Have you been waiting here long?"

"No. I just came in."

He led me to the kitchen. He apologized for the informality of his hotel service: visitors were so infrequent. But the good quality of his food would make up for it.

"Right," I agreed. "Your food is marvelous, friend Spawn."

THERE was a difference in Spawn's manner toward me now. He seemed far more wary. Outwardly he was in a high good humor. He asked nothing concerning my morning at the Government House. He puttered over his electron-stove, making me help him; he cursed the heat; he said one could not eat in such heat as this; but the meal he cooked, and the way he sat down opposite me and attacked it, belied him.

He was acting; but so was I. And perhaps I deceived him as little as he deceived me. We avoided the things which were uppermost in the thoughts of us both. But, when we had very nearly finished the meal, I decided to try him out. I said suddenly, out of a silence:

"Spawn, why didn't you tell me you were a producer of quicksilver?" I shot him a sharp glance. "You are, aren't you?"

It took him by surprise, but he recovered himself instantly. "Yes. Are you interested?"

I tried another shot. "What surprised me was that a wealthy mine owner—you are, aren't you?—should bother to keep an unprofitable hotel. Why bother with it, Spawn?"

I thought I knew the answer: he wanted Nareda's visitors under his eyes.

"That is a pleasure." There was irony in his tone. "I am a lonesome man. I like—interesting companionship, such as yours, young Grant."

It was on my tongue to hint at his daughter. But I thought better of it.

"I am going to the mine now," he said abruptly. "Would you like to come?"

"Yes," I smiled. "Thanks."

I WANTED to see his mine. But that he should be eager to show it, surprised me. I wondered what purpose he could have in that. I had a hint of it later; for when we took his little autocar and slid up the winding road into the bloated crags towering on the slope behind Nareda, he told me calmly:

"I shall have to put you in charge of my mine commander. I am busy elsewhere this afternoon. You will see the mine just as well without me."

He added, "I must go to the Government House: President Markes wants a report on my recent production."

So that was what Perona had told him over the audiphone just before our noonday meal?

It was an inferno of shadows and glaring lights, this underground cavern. As modern mining activities go, it was small and primitive. No more than a dozen men were here, beside the sweating pudgy mine commander who was my guide. A voluble fellow; of what original nationality I could not determine.

We stood watching the line of carts dumping the ore onto the endless lifting-belt. It went a hundred feet or so up and out of the cavern's ascending shaft, to fall with a clatter into the bins above the smelter.

"Rich ore," I said. "Isn't it?"

The cinnabar ran like thick blood-red veins in the rock.

"Rich," said the mine commander. "That it is. Rich. But who does it make rich? Only Spawn, not me." He waved his arms, airing his grievance with which for an hour past he had regaled me. "Only Spawn. For me, a dole each week."

The smelter was in a stone building —one of a small group of mine houses which stood in a cauldron depression above excavations. Rounded domes of rock towered above them. The sun, even at this tri-noon hour, was gone behind the heights above us. The murky shadows of night were gathering, the mists of the Lowlands settling. The tube-lights of the mine, strung between small metal poles, winked on like bleary eyes.

"Of a day soon I will fling this job to hell—"

I WAS paying scant attention to the fellow's tirade. Could there be smuggling going on from this mine? It all seemed to be conducted openly enough. If the production record were being falsified I felt that this dissatisfied mine commander was not aware of it. He showed me the smelter, where the quicksilver condensed in the coils and ran with its small luminous silver streams into the vats.

He was called away momentarily by one of his men, leaving me standing there. I was alone; no one seemed in sight, or within hearing. In the shadow of the condensers I drew out my transmitter and called Hanley.

I got him within a minute.

"Chief!"

"Yes, Phil. I hoped you'd call me. Didn't want to chance it, raising you when you might not be alone."

I told him swiftly what I had done; where I was now.

And Hanley said, with equal briskness: "I've an important fact. Just had Markes on secret wave-length. He tells me that Spawn has been saving up his quicksilver for six months past. He's got several hundred thousand dollar-standards' worth of it in ingots there right now."

"Here at the mine?"

"Yes. Got them all radiuminized, ready for the highest priced markets. Markes says he is scheduled to turn them over to the government checkers to-morrow. The Nareda government takes its share to-morrow; then Spawn exports the rest."

I heard a footstep. "Off, Chief! I'll call you later!"

I clicked off summarily. The little grid was under my shirt when the mine commander rejoined me.

FOR another half hour or so I hovered about the smelter house. A treasure of quicksilver ingots here? I mentioned it casually to my companion. He shot me a sharp glance.

"Spawn has told you that?"

"I heard it."

"His business. We do not talk of that. Never can I tell what Spawn will choose to take offense at."

We rambled upon other subjects. Later, he said, "We work not at night. But Spawn, he is here often at night, with his friend, the Señor Perona."

That caught my attention. "I met Perona this morning," I said quickly. "Is he a partner of Spawn's?"

"If he is so, I never was told it. But much he is here—at night."

"Why at night?"

The fellow really knew nothing. Or if he did, he was diplomatic enough not to jeopardize his post by babbling of it to me. He said:

"Perona is Spawn's friend. Why not? His daughter to marry: that will make him a son-in-law." He laughed. "An old fool, but not such a fool either. Spawn is rich."

"His daughter. Has he a daughter?"

"The little Jetta. You haven't seen her? Well, that is not strange. Spawn keeps her very hidden. A mystery about it: all Nareda talks, but no one knows; and Spawn does not like questions."

Spawn abruptly joined us! He came from the black shadows of the lurid smelter room. Had he heard us discussing Jetta? I wondered.

CHAPTER V

Mysterious Meeting

"AH Grant—have you enjoyed yourself?" He dismissed his subordinate. "I was detained. Sorry."

He was smoothly imperturable. "Have you seen everything? Quite a little plant I have here? We shut down early to-day. I will make ready to close."

I followed him about while he arranged for the termination of the day's activities. The clatter of the smelter house was presently still; the men departing. Spawn and I were the last to leave, save for the eight men who were the mine's night guards. They were stalwart, silent fellows, armed with electronic needle projectors.

The lights of the mine went low until they were mere pencil points of blue illumination in the gloom. The eery look of the place was intensified by the darkness and silence of the abnormally early nightfall. The fantastic crags stood dark with formless shadow.

Spawn stopped to speak to one of the guards. The men wore a gold-trimmed, but now dirty, white linen uniform, wilted by the heat—the uniform of Nareda's police. I remarked it to him.

"The government lent me the men," Spawn explained. "Of an ordinary time I have only one guard."

"But this then, is not an ordinary time?" I hinted.

He looked at me sharply. And upon sudden impulse, I added:

"President Markes said something about you having a treasure here. Radiumized quicksilver."

It was evidently Spawn's desire to appear thoroughly frank with me. He laughed. "Well then, if Markes has told you, then might I not as well admit it? The treasure is here, indeed yes. Will you like to see it?"

HE led me into a little strong room adjoining the smelter coil-rectifiers. He flashed his hand searchlight. On the floor, piled crosswise, were small moulded bars of refined quicksilver—dull, darkened silver ingots of this world's most precious metal.

"Quite a treasure, Grant, here tonight. See, it is radiumized."

He snapped off his torch. In the darkness the little bars glowed irridescent.

"To-morrow I will divide with our Nareda government. One-third for them. And my own share I will export: to Great New York, this shipment. Already I have the order for it."

He added calmly, "The duty is high, Grant. Too bad your big New York market is protected by so large a duty. With my cost of production—these accursed Lowland workmen who demand so much for their labor, and a third of all I produce taken by Nareda—there is not much in it for me."

He had re-lighted the room. I could feel his eyes on me, but I said nothing. It was obvious to me now that he knew I was a government customs agent.

I said, "This certainly interests me, friend Spawn. I'll tell you why some other time."

We exchanged significant glances, both of us smiling.

"Well can I guess it, young Grant. So here is my treasure. Without the duty I would soon be wealthy. Chut! Why should I roll in a pity for myself? There is a duty and I am an honest man, so I pay it."

I said, "Aren't you afraid to leave this stored here?" I knew that this pile of ingots—the quicksilver in its radiumized form—was worth four or five hundred thousand dollars in American gold-coin at the very least.

SPAWN shrugged. "Who would attack it? But of course I will be glad to be rid of it. It is a great responsibility—even though it carries international insurance, to protect my and the Nareda Government share."

He was sealing up the heavy barred portals of the little strong-room. There was an alarm-detector, connected with the office of Nareda's police commander. Spawn set the alarm carefully.

"I have every safeguard, Grant. There is really no danger." He added, as though with sudden thought, "Except possibly one—a depth bandit named De Boer. Ever you have heard of him?"

"Yes. I have."

We climbed into Spawn's small automatic vehicle. The lights of the mine faded behind us as we coasted the winding road down to the village.

"De Boer," said Spawn. "A fellow who lives by his wits in the depths. Near here, perhaps: who knows? They say he has many followers—fifty— a hundred, perhaps—outlaws: a cut-belly band it must be."

"Didn't he once take a hand in Nareda's politics?" I suggested.

Spawn guffawed. "That is so. He was once what they called a patriot here. He thought he might be made President. But Markes ran him out. Now he is a bandit. I have believe that American mail-ship which sank last year in the cauldron north of the Nares Sea—you remember how it was attacked by bandits?—I have always believe that was De Boer's band."

WE rolled back to Nareda. Spawn's manner had again changed. He seemed even more friendly than before. More at his ease with me. We had supper, and smoked together in his living room for half an hour afterward. But my thoughts were more on Jetta than on her father. There was still no evidence of her about the premises. Ah, if I only had known what had taken place there at Spawn's that afternoon while I was at the mine!

Soon after supper Spawn yawned. "I think I shall go to bed." His glance was inquiring. "What are you going to do?"

I stood up. "I'll go to bed, too. Markes wants to see me early in the morning. You'll be there, Spawn?"

"Yes. We will go together."

It was still no more than eight o'clock in the evening. Spawn followed me to my bedroom, and left me at its door.

"Sleep well. I will call you in time."

"Thanks, Spawn."

I wondered if there were irony in his voice as he said good night. No one could have told.

I DID not go to bed. I sat listening to the silence of my room and the garden, and Spawn's retreating footsteps. He had said he was sleepy, but nevertheless I presently heard him across the patio. He was apparently in the kitchen, cleaning away our meal, to judge by the rattling of his pans. It was as yet not much after hour eight of the evening. The hours before my tryst with Jetta seemed an interminable time to wait. She might not come, though, I was afraid, until midnight.

At all events I felt that I had some hours yet. And it occurred to me that the evening was not yet too far advanced for me to call upon Perona. He lived not far from here, I had learned. I wanted to see this beriboned old Minister of Nareda's Internal Affairs.

I would use as my excuse a desire to

discuss further the possibility of smuggler being here in Nareda.

I put on my hat and a light jacket, verified that my dirk was readily accessible and sealed up my room. Spawn apparently was still in the kitchen. I got out of the house, I felt sure, without him being aware of it.

THE Nareda streets were quiet. There was a few pedestrians, and none of them paid much attention to me. It was no more than ten minutes walk to Perona's home.

His house was set back from the road, surrounded by luxurious vegetation. There was a gate in front of the garden, and another, a hundred feet or so along a small alleyway which bordered the ground to my left. I was about to enter the front gate when sight of a figure passing under the garden foliage checked me. It was a man, evidently coming from the house and headed toward the side gate. He went through a shaft of light that slanted from one of the lower windows of the house.

Perona! I was sure it was he. His slight figure, with a gay, tri-cornered hat. A short tasseled cloak hanging from his shoulders. He was alone; walking fast. He evidently had not seen me. I crouched outside the high front wall, and through its lattice bars I saw him reach the side gate, open it swiftly, pass through, and close it after him. There was something furtive about his manner, for all he was undisguised. I decided to follow him.

The front street fortunately was deserted at the moment. I waited long enough for him to appear. But he did not; and when I ran to the alley corner—chancing bumping squarely into him—I saw him far down its dim, narrow length where it opened into the back street which bordered his grounds to the rear. He turned to the left and shot a swift glance up the alley, which I anticipated, provided for by drawing back. When I looked again, he was gone.

I HAVE had some experience at playing the shadow. But it was not easy here along the almost deserted and fairly bright Nareda streets. Perona was walking swiftly down the slope toward the outskirts of the village where it bordered upon the Nares Sea. For a time I thought he was headed for the landing field, but at a cross-path he turned sharply to the right, away from the field, whose sheen of lights I could now see down the rocky defile ahead of me. There was nothing but broken, precipitous rocky country ahead of him, into which this path he had taken was winding. What could Perona, a Minister, be engaged in, wandering off alone into this black, deserted region?

It was black indeed, by now. The village was soon far behind us. A storm was in the night air; a wind off the sea; solid black clouds overhead blotted out the moon and stars. The crags and buttes and gullies of this tumbled area loomed barely visible about me. There were times when only my feel of the path under my feet kept me from straying, to fall into a ravine or crevice.

I prowled perhaps two hundred yards behind Perona. He was using a tiny hand-flash now; it bobbed and winked in the darkness ahead, vanishing sometimes when a curve in the path hid him, or when he plunged down into a gully and up again. I had no searchbeam. Nor would I have dared use one: Perona could too obviously have seen that someone was following him.

There was half a mile of this, I think, though it seemed interminable. I could hear the sea, rising with the wind, pounding against the rocks to my left. Then, a distance ahead, I saw lights moving. Perona's—and others. Three or four of them. Their combined glow made a radiance which illumined the path and rocks. I could see the figures of several men whom Perona had joined. They stood a moment and then moved off. To the right a ragged cliff wall towered the path. The spots

of light bobbed toward it. I caught the vague outline of a huge broken opening, like a cave mouth in the cliff. The lights were swallowed by it.

I crept cautiously forward.

CHAPTER VI

Ether-wave Eavesdropping

I HAD thought it was a cavern mouth into which the men had disappeared, but it was not. I reached it without any encounter. It loomed above me, a great archway in the cliff—an opening fifty feet high and equally as broad. And behind it was a roofless cave—a sort of irregularly circular bowl, five hundred feet across its broken, bowlder-strewn, caked-ooze floor.

I crouched in the blackness under the archway. The moon had risen and its light filtered with occasional shafts through the swift-flying black clouds overhead. The scene was brighter. It was dark in the archway, but a glow of moonlight in the bowl beyond showed me its tumbled floor and the precipitous, eroded walls, like a crater-rim, which encircled it.

The men whom Perona had met were across the bowl near its opposite side. I could see the group of them, five hundred feet from me, by a little moonlight that was on them; also by the sheen from the spots of their hand-lights. Four or five men, and Perona. I thought I distinguished the aged Minister sitting on a rock, and before him a huge giant man's figure striding up and down. Perona seemed talking vehemently; the men were listening; the giant paused occasionally in his pacing to fling a question.

All this I saw with my first swift glance. My attention was drawn from the men to an object near them. The nose of a flyer showed between two upstanding crags on the floor of the valley. Only its forward horizontal propellors and the tip of its cabin and landing gear were visible, but I could guess that it was a fair-sized ship.

The men were too far away for me to hear them. Could I get across the floor of the bowl without discovery? It did not seem so. The accursed moonlight became stronger every moment. Then I saw a guard—a dark figure of a man showing just inside the archway, some seventy feet from me. He was leaning against a rock, facing my way. In his hands was a thick-barreled electronic projector.

I could not advance: that was obvious. The moonlight lay in a clear clean patch beyond the archway. The guard stood at its edge.

A MINUTE or two had passed. Perona was still talking vehemently. I was losing it: not a word was audible. Yet I felt that if I could hear Perona now, much that Hanley and I wanted to learn would be made clear to us. My little microphone receiver could be adjusted for audible air vibrations. I crouched and held it cautiously above my head with its face, like a listening ear, turned toward the distant men. My single-vacuum amplification brought up the sound until their voices sounded like whispers murmured in my ear-grids.

"De Boer, listen to me—"

Perona's voice. They must have been chance words spoken loudly. It was all I could hear, save tantalizing, unintelligible murmurs.

So this was De Boer, the bandit! The big fellow pacing before Perona. I wanted infinitely more, now, to hear what was being said.

I thought of Hanley. There might be a way of handling this.

I had to murmur very softly. I was hidden in these shadows from the guard's sight, but he was close enough to hear my normal voice. I chanced it. A wind was sucking through the archway with an audible whine: the guard might not hear me.

"X, 2, AY."

The sorter's desk. He came in. I murmured Hanley's rating. "Rush. Danger. Special."

It went swiftly through. Hanley, thank Heaven, was at his desk.

I PLUGGED in my little image finder; held it over my head; turned it slowly. I whispered:

"Look around, Chief. See where I am? Near Nareda; couple of miles out. Followed Perona; he met these men.

"The big one is De Boer, the depth bandit. I can't hear what they're saying—but I *can* send you their voice murmurs."

"Amplify them all you can. Relay them up," Hanley ordered.

I caught Perona's murmurs again; I swung them through my tiny transformers and off my transmitter points into the ether.

"Hear them, Chief?"

"Yes. I'll try further amplification."

It was what I had intended. Hanley's greater power might be able to amplify those murmurs into audible strength.

"I'm getting them, Phil."

He swung them back to me. Grotesquely distorted, blurred with tube-hum and interference crackle, they roared in my ear-grids so loudly that I saw the nearby guard turn his head as though startled. Listening. . . .

But evidently he concluded it was nothing.

I cut down the volume. Hanley switched in.

"By God, Phil! This—"

"Off, Chief! Let me hear, too!"

HE cut away. Those distorted voices! They came from Perona and the bandits to me across this five hundred-foot moonlit bowl; from me, thirteen hundred miles up to Hanley's instruments; and back to me once more. But the words, most of them, now were distinguishable.

Perona's voice: "I tell it to you, De Boer . . . and a good chance for you to make the money."

"But will they pay?"

"Of course they will pay. Big. A ransom princely."

"And why, Perona? Why princely? Who is this fellow—so important?"

"He is with rich business men, I tell to you."

"A private citizen?"

". . . And a private citizen, of a surety. Fool! Have you come to be a coward, De Boer?"

"Pah!"

"Well then I tell you it is a lifetime chance. All of it I have arranged. If he was a government agent, that would be very different, for they are very keen, this administration of the American government, to protect their agents. But their private citizens—it is a scandal! Do you not ever pick the newscasters' reports, De Boer? Has it not been a scandal that this administration does very little for its citizens abroad?"

"And you want to get rid of this fellow? Why, Perona?"

"That is not your concern. The ransom is to be all yours. Make away with him—in the depths somewhere. Demand your ransom. Fifty thousand gold-standards! Demand it of me. Of Nareda!"

"And you will pay it?"

"I promise it. Nareda will pay it—and Nareda will collect the ransom from the American capitalists. Very easy."

His voice fell lower. "Between us, you will get the ransom money from Nareda—and then kill your prisoner if you like. Call it an accident; what matter? And dead men are silent men, De Boer. I will see that no real pursuit is made after you."

THEY were talking about me! It was obvious. Questions rushed at me. Perona, planning with this bandit to abduct me. Hold me for ransom. Or kill me! But Perona knew that I was not a private citizen. He was lying to DeBoer, to persuade him.

Why this attack upon me? Was Spawn in on it? Why were they so anxious to get rid of me? Because of Jetta? Or because I was dangerous,

prying into their smuggling activities. Or both?

De Boer: ". . . Get up with my men through the streets to Spawn's house? You have it fixed?"

"Yes. Over the route from here as I told you, there are no police to-night. I have ordered them off. In the garden. *Dios!* You offer so many objections! I tell you all is fixed. In an hour, half an hour; even now, perhaps, the Americano is in the garden. The girl has promised to meet him there. He will be there, fear not. Will you go?"

"Yes."

"Hah! That is the De Boer I have always admired!"

I could see them in the moonlight across the pit. Perona now standing up, the giant figure of the bandit towering over him.

HANLEY'S microscopic voice cut in: "Getting it, Phil? To seize you for ransom!"

"Yes. I hear it."

"This girl. Who—?"

"Wait, Chief. Off—"

De Boer: "I will do it! Fifty thousand."

Perona: "An hour, now. Spawn will be at his home asleep."

"And you will go to the mine?"

"Yes. Now, from here. You seize this fellow Grant, and then attack the mine. Our regular plan, De Boer. This does not change it."

Attack Spawn's mine! Half a million of treasure was there to-night!

Perona was chuckling: "You give Spawn's guards the signal. They are all my men—in my pay. They will run away when you appear."

Hanley cut in again. "By the gods, they're after that treasure! Phil, listen to me! you must. ." His voice faded.

"Chief, I can't hear you!"

Hanley came again: ". . . And I will notify Porto Rico. The local patrol will be about ready to leave."

"Or notify Nareda headquarters," I suggested. "If you can get President Markea, he can send some police to the mine—"

"And find all Nareda's police bribed by Perona? I'll get Porto Rico. We have an hour or two; the patrol can reach you in an hour."

The bandits were preparing to leave here. Two or three of them had gone to the flyer. Perona and De Boer were parting.

". . . Well, that is all, De Boer."

"Right, Señor Perona, I will start shortly."

"On foot, by the street route to Spawn's—"

Hanley's hurried voice came back: "I've sent the call to Porto Rico."

THE guard had moved again. He was no more than forty feet away from me now—standing up gazing directly toward where I was crouching over my tiny instruments in the shadows of the rocky arch. A footstep sounded behind me, on the path outside the arch. Someone approaching!

A tiny light bobbing!

Then a voice calling, "Perona! De Boer!"

The guard took a step forward; stopped, with levelled weapon.

Then the voice again: it was so loud it went through my opened relay, flashed up to New York, and blew out half a dozen of Hanley's attuned vacuums.

"Perona!"

Spawn's voice! He was coming toward me! I lay prone, my little grids switched off. I held my breath.

Spawn's figure went past within ten feet of me. But he did not see me.

He met the guard. "Hello, Gutierrez. The damned American—"

Perona and De Boer came hastening. Spawn joined them in the moonlight just beyond the archway, close enough for me to hear them plainly. Spawn was out of breath, panting from his swift walk. He greeted them with a roar.

"The American—he is gone!"

"*Dios!* Gone where, Spawn?"

"The hell—how do I know, Perona? He is gone from his room—from the house. Maybe he followed you here? Did he?"

CHAPTER VII

Behind the Sealed Door

THERE was a moment when I think I might have escaped unseen from that archway. But I was too amazed at Spawn's appearance to think of my own situation. I had believed that Perona was plotting against Spawn, meeting these bandits in this secret place; I had just heard them planning to attack Spawn's mine—to rob it of the treasure doubtless, which I knew was stored there.

But I realized now it was not a plot against Spawn. He had come here swiftly to join Perona and tell him that I, their intended victim, was missing. He had greeted the bandit guard by name. He seemed, indeed, as well known to these bandits as Perona himself.

They stood now in a group some thirty feet away from me. I could hear their excited voices perfectly clearly. My instruments were off; but I recall that as I listened to Spawn I was also aware of the tingle of the electrode-band on my chest—Hanley, vigorously calling me back to find out why I had so summarily disconnected.

"I took him to his room," Spawn was explaining excitedly. "De duvel, why should I have sealed him in? How could I? He is no child!"

De Boer laughed caustically. "And so he has walked away from you? I think I am a fool to mix myself with you two."

Perona retorted, "I have made you rich, De Boer. Think what you like: to-night is the end of our partnership. Only, you do what I have told you to-night."

"Hah! How can I? Your American has flown his trap."

This guard—this Gutierrez, as Spawn had called him—was listening with interest. De Boer's several other men were gathered there. I felt myself safe where I was, for the moment at least.

I CUT Hanley in. "Chief, they're closer! Spawn has come! They've missed me! I'll relay what they're saying, but you step it down: there's too much volume."

"You're all right, Phil? Thank Heaven for that! Something blew my vacuums."

"Chief, listen—here they are—"

Perona: "But he will be back. In the garden now, no doubt, with Jetta."

De Boer: "Ah—the little Jetta! So she is there, Spawn? Not in years have you spoken of your daughter. A young lady now, I suppose. Is it so?"

Spawn cursed. "We leave her out of this. You follow the Señor's plan."

"Come to your house? You think the bird will be there for me to seize?"

"Yes," Perona put in. "You go there; in an hour. Then to the mine."

Spawn undoubtedly was in this plot to attack his mine! He said, "At the mine we have arranged everything. Damn this American! But for Perona I would not bother with him."

"But you will bother," Perona interjected.

De Boer laughed again. "I would be witless could I not figure this! He is a young man, and so handsome he has frightened you with the little Jetta! Is that it, Perona? Jealous, eh?"

I had been holding the image finder so that Hanley might see them. Hanley's voice rattled my ear-grid. "Phil! Get away from there! Look! De Boer is searching!"

DE BOER had, a moment before, spoken quietly aside to Gutierrez. And now three or four of the men were spreading out, poking about with small hand-flashes. Searching for me! The possibility that I might be here, eavesdropping!

Hanley repeated vehemently, "Phil, they'll find you! Get out of there: the way is still open!"

Gutierrez was approaching the archway. But I lingered a moment longer.

"Chief, you heard about that girl, Jetta, Spawn's daughter—"

I stopped. Perona was saying, "Spawn, was Jetta still in her room? You did not untie her?"

"No."

"And gagged? Suppose the Americano was back there now? She might call to him, and he would release her—"

De Boer: "How do you know he is not around here? Listening?"

With the assumption that I might be within hearing, De Boer tried to trap me. Gutierrez, at a signal now, suddenly dashed through the archway and planted himself on the path outside. The other searchers spread their rays; the rocks all about me were lighted. But my niche was still untouched.

De Boer: "If he is around here—"

Perona: "He could not have followed me; I was too careful."

I was murmuring: "Chief, they've got that girl."

"Phil, you get away! Go to Markes. Stay with him."

"But Chief, that Jetta, I—"

"Keep out of this! You're only one; you can't help any! I've sent for the Porto Rican patrol ship to handle this."

"Chief, I'm going back to Spawn's."

"No—"

I cut off abruptly. In another moment I would have been discovered. The searchers were headed directly for me.

I MOVED, crouching, back along the inner wall of the archway. The moon was momentarily behind a cloud. It was black under the arch; and out front it was so dim I could only see the faint blob of Gutierrez's standing figure, and the spot of his flashlight.

Perona: "He is not around here, De Boer. That is foolish."

Spawn: "He could have gone anywhere. Maybe a walk around the village."

Perona: "Go back home, Spawn. De Boer will come—"

Their voices faded as I moved away. A searching bandit behind me poked with his light into the crevice where a moment before I had been crouching. I moved faster. Only Gutierrez now was in front of me. He was at the far end of the arch. I could slip past, and still be fifty feet from him—if I could avoid his swinging little light-beam.

I was running now, chancing that he would hear me. I was on the path; I could see it vaguely.

From behind me came a sizzling flash, and the ting of the flying needle as it missed me by a foot.

"The Americano! He goes there!"

Another shot. The shouts of the bandits in the archway. A turmoil back there.

But it was all behind me. I leaped sidewise off the path as Guitierrez' small light-beam swept it. I ran stumbling through a stubble of boulders, around an upstanding rock spire, back to the path again.

There were other shots. Then De Boer's voice, faint by distance: "Stop! Fools! We will alarm the village! The landing field can see our shots from here! Take it easy! You can't get him!"

The turmoil quieted. I went around a bend in the path, running swiftly.

Pursuit was behind me. I could hear them coming.

IT was a run of no more than ten minutes to the junction where, down the slope, I could see the lights of the landing field.

The glow of the village was ahead of me. Then I was in its outskirts. Occasional dark houses. Deserted streets.

I slowed to a fast walk. I was breathless, panting in the heat.

I heard no pursuit now. But Spawn and the rest of them doubtless were after me. Would they head back for Spawn's inn? I thought they would. But I could beat them back there; I was sure there was no shorter route than this I was taking.

Would they use their flyer? That

would not gain them any time, what with launching it and landing, for so short a flight. And a bandit flyer could not very well land unseen or unnoticed, even in somnolent Nareda.

I reached the main section of the village. There were occasional lights and pedestrians. My haste was noticeable, but I was not accosted. There seemed no police about. I recalled Perona's remark that he had attended to that.

My electrode was tingling. I had been running again. I slowed down.

"Chief?"

"Phil." His voice carried relief. "You got away?"

"Yes. I'm in the village."

"Go to President Markes."

"No, I'm headed for Spawn's! They're all behind me; I can get there a few minutes ahead of them."

I PANTED an exclamation, incoherently, but frankly, about Jetta. "I'm going to get her out of there."

"Phil, what in hell—"

I told him.

"So you've fallen in love with a girl? Entangled—"

"Chief!"

"Go after her, Phil! Got her bound and gagged, have they? Going to marry her to this Perona? Like the Middle Ages?"

I had never seen this side of Hanley.

"Get her if you want her. Get her out of there. Take her to Markes—No, I wouldn't trust anybody in Nareda! Take her into the uplands behind the village. But keep away from that mine! Have you got flash-fuses?"

"Yes."

I was within sight of Spawn's house. The street was dim and deserted. I was running again.

I panted, "I'm—almost at Spawn's!"

"Good! When it's over, whatever happens up there at the mine, then signal the patrol."

"Yes."

I reached Spawn's front gate. The house and front garden were dark.

"Use your fuses, Phil. What colors?"

"I have red and blue."

"I'll talk to the patrol ship again. Tell them to watch for you. Red and blue. Two short red flashes, a long blue."

"Right, Chief. I'm here at Spawn's, cutting off."

"Come back on when you can." His voice went anxious again. "I'll wait here."

"All right."

I cut silent. I ran through the front doorway of Spawn's inn. The living room was dim and empty. Which way was Jetta's room? I could only guess.

I had a few minutes, perhaps, before my pursuers would arrive.

I REACHED the inner, patio garden. The moon was well out from under the clouds now. The patio shimmered, a silent, deserted fairyland.

"Jetta!" I called it softly. Then louder. "Jetta!"

Spawn's house was fairly large and rambling. There were so many rooms. Jetta was gagged: how could she answer me? But I had no time to search for her.

"Jetta?"

And then came her voice. "Philip?"

"Jetta! Which way? Where are you?"

"Here! This way; in my room."

A window and a door near the pergola. "Jetta!"

"Yes. I am in here. They tied me up. Not so loud, Phil: father will hear you."

"He's gone out."

I reached her garden door. Turned its handle. Rattled the door. Shoved frantically with my shoulder!

The metal door was firmly sealed!

(To be continued)

One of the men rolled free and came lurching toward us.

The Terrible Tentacles of L-472

By Sewell Peaslee Wright

IT was a big mistake. I should not have done it. By birth, by instinct, by training, by habit, I am a man of action. Or I was. It is queer that an old man cannot remember that he is no longer young.

Commander John Hanson of the Special Patrol Service records another of his thrilling interplanetary assignments.

But it was a mistake for me to mention that I had recorded, for the archives of the Council, the history of a certain activity of the Special Patrol—a bit of secret history* which may not be mentioned here. Now they insist—by "they" I refer to the Chiefs of the Special Patrol Service—that I write of other achievements of the Service, other adventures worthy of note.

*Editor's Note: "The Forgotten Planet," July issue of Astounding Stories.

Perhaps that is the penalty of becoming old. From commander of the *Budi*, one of the greatest of the Special Patrol ships, to the duties of recording ancient history, for younger men to read and dream about. That is a shrewd blow to one's pride.

But if I can, in some small way, add luster to the record of my service, it will be a fitting task for a man grown old and gray in that service; work for hands too weak and palsied for sterner duties.

But I shall tell my stories in my own way; after all, they are my stories. And I shall tell the stories that appeal to me most. The universe has had enough and too much of dry history; these shall be adventurous tales to make the blood of a young man who reads them run a trifle faster—and perhaps the blood of the old man who writes them.

This, the first, shall be the story of the star L-472. You know it to-day as Ibit, port-o'-call for interplanetary ships, and source of ocrite for the universe, but to me it will always be L-472, the world of terrible tentacles.

MY story begins nearly a hundred years ago—reckoned in terms of Earth time, which is proper, since I am a native of Earth—when I was a young man. I was sub-commander, at the time, of the *Kalid*, one of the early ships of the Special Patrol.

We had been called to Zenia on special orders, and Commander Jamison, after an absence of some two hours, returned to the *Kalid* with his face shining, one of his rare smiles telling me in advance that he had news—and good news.

He hurried me up to the deserted navigating room and waved me to a seat.

"Hanson," he said, "I'm glad to be the first to congratulate you. You are now Commander John Hanson, of the Special Patrol Ship *Kalid!*"

"Sir," I gasped, "do you mean—"

His smile broadened. From the breast pocket of the trim blue and silver uniform of our Service he drew a long, crackling paper.

"Your commission," he said. "I'm taking over the *Borelis*."

It was my turn to extend congratulations then; the *Borelis* was the newest and greatest ship of the Service. We shook hands, that ancient gesture of good-fellowship on Earth. But as our hands unclasped, Jamison's face grew suddenly grave.

"I have more than this news for you, however," he said slowly. "You are to have a chance to earn your comet hardly."

I SMILED broadly at the mention of the comet, the silver insignia, worn over the heart, that would mark my future rank as commander, replacing the four-rayed star of a sub-commander which I wore now on my tunic.

"Tell me more, sir," I said confidently.

"You have heard of the Special Patrol Ship *Filanus?*" asked my late commander gravely.

"Reported lost in space," I replied promptly.

"And the *Dorlos?*"

"Why—yes; she was at Base here at our last call," I said, searching his face anxiously. "Peter Wilson was Second Officer on her—one of my best friends. Why do you ask about her, sir?"

"The *Dorlos* is missing also," said Commander Jamison solemnly. "Both of these ships were sent upon a particular mission. Neither of them has returned. It is concluded that some common fate has overtaken them. The *Kalid*, under your command, is commissioned to investigate these disappearances.

"You are not charged with the mission of these other ships; your orders are to investigate their disappearance. The course, together with the official patrol orders, I shall hand you presently, but with them go verbal orders.

"You are to lay and keep the course designated, which will take you well out of the beaten path to a small world

which has not been explored, but which has been circumnavigated a number of times by various ships remaining just outside the atmospheric envelope, and found to be without evidence of intelligent habitation. In other words, without cities, roads, canals, or other evidence of human handiwork or civilization.

"I BELIEVE your instructions give you some of this information, but not all of it. This world, unnamed because of its uninhabited condition, is charted only as L-472. Your larger charts will show it, I am sure. The atmosphere is reported to be breatheable by inhabitants of Earth and other beings having the same general requirements. Vegetation is reported as dense, covering the five continents of the world to the edges of the northern and southern polar caps, which are small. Topographically, the country is rugged in the extreme, with many peaks, apparently volcanic, but now inactive or extinct, on all of its five large continents."

"And am I to land there, sir?" I asked eagerly.

"Your orders are very specific upon that point," said Commander Jamison. "You are not to land until you have carefully and thoroughly reconnoitered from above, at low altitude. You will exercise every possible precaution. Your specific purpose is simply this: to determine, if possible, the fate of the other two ships, and report your findings at once. The Chiefs of the Service will then consider the matter, and take whatever action may seem advisable to them." Jamison rose to his feet and thrust out his hand in Earth's fine old salute of farewell.

"I must be going, Hanson," he said. "I wish this patrol were mine instead of yours. You are a young man for such a responsibility."

"But," I replied, with the glowing confidence of youth, "I have the advantage of having served under Commander Jamison!"

HE smiled as we shook again, and shook his head.

"Discretion can be learned only by experience," he said. "But I wish you success, Hanson; on this undertaking, and on many others. Supplies are on their way now; the crew will return from leave within the hour. A young Zenian, name of Dival, I believe, is detailed to accompany you as scientific observer—purely unofficial capacity, of course. He has been ordered to report to you at once. You are to depart as soon as feasible: you know what that means. I believe that's all— Oh, yes! I had almost forgotten.

"Here, in this envelope, are your orders and your course, as well as all available data on L-472. In this little casket is—your comet, Hanson. I know you will wear it with honor!"

"Thank you, sir!" I said, a bit huskily. I saluted, and Commander Jamison acknowledged the gesture with stiff precision. Commander Jamison always had the reputation of being something of a martinet.

When he had left, I picked up the thin blue envelope he had left. Across the face of the envelope, in the—to my mind—jagged and unbeautiful Universal script, was my name, followed by the proud title: *"Commander, Special Patrol Ship Kalid."* My first orders!

There was a small oval box, of blue leather, with the silver crest of the Service in bas-relief on the lid. I opened the case, and gazed with shining eyes at the gleaming silver comet that nestled there.

Then, slowly, I unfastened the four-rayed star on my left breast, and placed in its stead the insignia of my commandership.

Worn smooth and shiny now, it is still my most precious possession.

KINCAIDE, my second officer, turned and smiled as I entered the navigating room.

"L-472 now registers maximum attraction, sir," he reported. "Dead ahead, and coming up nicely. My last figures,

completed about five minutes ago, indicate that we should reach the gaseous envelope in about ten hours." Kincaide was a native of Earth, and we commonly used Earth time-measurements in our conversation. As is still the case, ships of the Special Patrol Service were commanded without exception by natives of Earth, and the entire officer personnel hailed largely from the same planet, although I have had several Zenian officers of rare ability and courage.

I nodded and thanked him for the report. Maximum attraction, eh? That, considering the small size of our objective, meant we were much closer to L-472 than to any other regular body.

Mechanically, I studied the various dials about the room. The attraction meter, as Kincaide had said, registered several degrees of attraction, and the red slide on the rim of the dial was squarely at the top, showing that the attraction was coming from the world at which our nose was pointed. The surface-temperature gauge was at normal. Internal pressure, normal. Internal moisture-content, a little high. Kincaide, watching me, spoke up:

"I have already given orders to dry out, sir," he said.

"Very good, Mr. Kincaide. It's a long trip, and I want the crew in good condition." I studied the two charts, one showing our surroundings laterally, the other vertically, all bodies about us represented as glowing spots of green light, of varying sizes; the ship itself as a tiny scarlet spark. Everything shipshape; perhaps a degree or two of elevation when we were a little closer—

"May I come in, sir?" broke in a gentle, high-pitched voice.

"Certainly, Mr. Dival," I replied, answering in the Universal language in which the request had been made. "You are always very welcome." Dival was a typical Zenian of the finest type; slim, very dark, and with the amazingly intelligent eyes of his kind. His voice was very soft and gentle, and like the voice of all his people, clear and high-pitched.

"Thank you," he said. "I guess I'm over-eager, but there's something about this mission of ours that worries me. I seem to feel—" He broke off abruptly and began pacing back and forth across the room.

I STUDIED him, frowning. The Zenians have a strange way of being right about such things; their high-strung, sensitive natures seem capable of responding to those delicate, vagrant forces which even now are only incompletely understood and classified.

"You're not used to work of this sort," I replied, as bluffly and heartily as possible. "There's nothing to worry about."

"The commanders of the two ships that disappeared probably felt the same way, sir," said Dival. "I should have thought the Chiefs of the Special Patrol Service would have sent several ships on a mission such as this."

"Easy to say," I laughed bitterly. "If the Council would pass the appropriations we need, we might have ships enough so that we could send a fleet of ships when we wished. Instead of that, the Council, in its infinite wisdom, builds greater laboratories and schools of higher learning—and lets the Patrol get along as best it can."

"It was from the laboratories and the schools of higher learning that all these things sprang," replied Dival quietly, glancing around at the array of instruments which made navigation in space possible.

"True," I admitted rather shortly. "We must work together. And as for what we shall find upon the little world ahead, we shall be there in nine or ten hours. You may wish to make some preparations."

"Nine or ten hours? That's Earth time, isn't it? Let's see: about two and a half enaros?"

"Correct," I smiled. The Universal method of reckoning time had never appealed to me. For those of my read-

ers who may only be familiar with Earth time measurements, an enar is about eighteen Earth days, an enaren a little less than two Earth days, and an enaro nearly four and a half hours. The Universal system has the advantage, I admit, of a decimal division; but I have found it clumsy always. I may be stubborn and old-fashioned, but a clock face with only ten numerals and one hand still strikes me as being unbeautiful and inefficient.

"Two and a half enaros," repeated Dival thoughtfully. "I believe I shall see if I can get a little sleep now; I should not have brought my books with me, I'm afraid. I read when I should sleep. Will you call me should there be any developments of interest?"

I assured him that he would be called as he requested, and he left.

"Decent sort of a chap, sir," observed Kincaide, glancing at the door through which Dival had just departed.

"A student," I nodded, with the contempt of violent youth for the man of gentler pursuits than mine, and turned my attentions to some calculations for entry in the log.

BUSIED with the intricate details of my task, time passed rapidly. The watch changed, and I joined my officers in the tiny arched dining salon. It was during the meal that I noticed for the first time a sort of tenseness; every member of the mess was unusually quiet. And though I would not have admitted it then, I was not without a good deal of nervous restraint myself.

"Gentlemen," I remarked when the meal was finished, "I believe you understand our present mission. Primarily, our purpose is to ascertain, if possible, the fate of two ships that were sent here and have not returned. We are now close enough for reasonable observation by means of the television disc, I believe, and I shall take over its operation myself.

"There is no gainsaying the fact that whatever fate overtook the two other Patrol ships, may lay in wait for us. My orders are to observe every possible precaution, and to return with a report. I am going to ask that each of you proceed immediately to his post, and make ready, in so far as possible, for any eventuality. Warn the watch which has just gone off to be ready for instant duty. The disintegrator ray generators should be started and be available for instant emergency use, maximum power. Have the bombing crews stand by for orders."

"What do you anticipate, sir?" asked Correy, my new sub-commander. The other officers waited tensely for my reply.

"I don't know, Mr. Correy," I admitted reluctantly. "We have no information upon which to base an assumption. We do know that two ships have been sent here, and neither of them have returned. Something prevented that return. We must endeavor to prevent that same fate from overtaking the *Kalid*—and ourselves."

HURRYING back to the navigating room, I posted myself beside the cumbersome, old-fashioned television instrument. L-472 was near enough now to occupy the entire field, with the range hand at maximum. One whole continent and parts of two others were visible. Not many details could be made out.

I waited grimly while an hour, two hours, went by. My field narrowed down to one continent, to a part of one continent. I glanced up at the surface temperature gauge and noted that the hand was registering a few degrees above normal. Correy, who had relieved Kincaide as navigating officer, followed my gaze.

"Shall we reduce speed, sir?" he asked crisply.

"To twice atmospheric speed," I nodded. "When we enter the envelope proper, reduce to normal atmospheric speed. Alter your course upon

entering the atmosphere proper, and work back and forth along the emerging twilight zone, from the north polar cap to the southern cap, and so on."

"Yes, sir!" he replied, and repeated the orders to the control room forward.

I pressed the attention signal to Dival's cubicle, and informed him that we were entering the outer atmospheric fringe.

"Thank you, sir!" he said eagerly. "I shall be with you immediately."

In rapid succession I called various officers and gave terse orders. Double crews on duty in the generator compartment, the ray projectors, the atomic bomb magazines and release tubes. Observers at all observation posts, operators at the two smaller television instruments to comb the terrain and report instantly any object of interest. With the three of us searching, it seemed incredible that anything could escape us. At atmospheric altitudes even the two smaller television instruments would be able to pick out a body the size of one of the missing ships.

DIVAL entered the room as I finished giving my orders.

"A strange world, Dival," I commented, glancing towards the television instrument. "Covered with trees, even the mountains, and what I presume to be volcanic peaks. They crowd right down to the edge of the water."

He adjusted the focusing lever slightly, his face lighting up with the interest of a scientist gazing at a strange specimen, whether it be a microbe or a new world.

"Strange . . . strange . . ." he muttered. "A universal vegetation . . . no variation of type from equator to polar cap, apparently. And the water—did you notice its color, sir?"

"Purple," I nodded. "It varies on the different worlds, you know. I've seen pink, red, white and black seas, as well as the green and blue of Earth."

"And no small islands," he went on, as though he had not ever heard me. "Not in the visible portion, at any rate."

I was about to reply, when I felt the peculiar surge of the *Kalid* as she reduced speed. I glanced at the indicator, watching the hand drop slowly to atmospheric speed.

"Keep a close watch, Dival," I ordered. "We shall change our course now, to comb the country for traces of two ships we are seeking. If you see the least suspicious sign, let me know immediately."

HE nodded, and for a time there was only a tense silence in the room, broken at intervals by Correy as he spoke briefly into his microphone, giving orders to the operating room.

Perhaps an hour went by. I am not sure. It seemed like a longer time than that. Then Dival called out in sudden excitement, his high, thin voice stabbing the silence:

"Here, sir! Look! A little clearing—artificial, I judge—and the ships! Both of them!"

"Stop the ship, Mr. Correy!" I snapped as I hurried to the instrument. "Dival, take those reports." I gestured towards the two attention signals that were glowing and softly humming and thrust my head into the shelter of the television instrument's big hood.

Dival had made no mistake. Directly beneath me, as I looked, was a clearing, a perfect square with rounded corners, obviously blasted out of the solid forest by the delicate manipulation of sharply focused disintegrator rays. And upon the naked, pitted surface thus exposed, side by side in orderly array, were the missing ships!

I STUDIED the strange scene with a heart that thumped excitedly against my ribs.

What should I do? Return and report? Descend and investigate? There was no sign of life around the ships, and no evidence of damage. If I

brought the *Kalid* down, would she make a third to remain there, to be marked "lost in space" on the records of the Service?

Reluctantly, I drew my head from beneath the shielding hood.

"What were the two reports, Dival?" I asked, and my voice was thick. "The other two television observers?"

"Yes, sir. They report that they cannot positively identify the ships with their instruments, but feel certain that they are the two we seek."

"Very good. Tell them, please, to remain on watch, searching space in every direction, and to report instantly anything suspicious. Mr. Correy, we will descend until this small clearing becomes visible, through the ports, to the unaided eye. I will give you the corrections to bring us directly over the clearing." And I read the finder scales of the television instrument to him.

He rattled off the figures, calculated an instant, and gave his orders to the control room, while I kept the television instrument bearing upon the odd clearing and the two motionless, deserted ships.

AS we settled, I could make out the insignia of the ships, could see the pitted, stained earth of the clearing, brown with the dust of disintegration. I could see the surrounding trees very distinctly, now; they seemed very similar to our weeping willows, on Earth, which, I perhaps should explain, since it is impossible for the average individual to have a comprehensive knowledge of the flora and fauna of the entire known Universe, is a tree of considerable size, having long, hanging branches arching from its crown and reaching nearly to the ground. These leaves, like typical willow leaves, were long and slender, of rusty green color. The trunks and branches seemed to be black or dark brown; and the trees grew so thickly that nowhere between their branches was the ground visible.

"Five thousand feet, sir," said Correy. "Directly above the clearing. Shall we descend further?"

"A thousand feet at a time, Mr. Correy," I replied, after a moment's hesitation. "My orders are to exercise the utmost caution. Mr. Dival, please make a complete analysis of the atmosphere. I believe you are familiar with the traps provided for the purpose?"

"Yes. You propose to land, sir?"

"I propose to determine the fate of those two ships and the men who brought them here," I said with sudden determination. Dival made no reply, but as he turned to obey orders, I saw that his presentiment of trouble had not left him.

"Four thousand feet, sir," said Correy.

I NODDED, studying the scene below us. The great hooded instrument brought it within, apparently, fifty feet of my eyes, but the great detail revealed nothing of interest.

The two ships lay motionless, huddled close together. The great circular door of each was open, as though opened that same day — or a century before.

"Three thousand feet, sir," said Correy.

"Proceed at the same speed," I replied. Whatever fate had overtaken the men of the other ships had caused them to disappear entirely—and without sign of a struggle. But what conceivable fate could that be?

"Two thousand feet, sir," said Correy.

"Good," I said grimly. "Continue with the descent, Mr. Correy."

Dival hurried into the room as I spoke. His face was still clouded with foreboding.

"I have tested the atmosphere, sir," he reported. "It is suitable for breathing by either men of Earth or Zenia. No trace of noxious gases of any kind. It is probably rather rarified, such as one might find on Earth or Zenia at high altitudes."

"One thousand feet, sir," said Correy.

I hesitated an instant. Undoubtedly the atmosphere had been tested by the other ships before they landed. In the case of the second ship, at any rate, those in command must have been on the alert against danger. And yet both of those ships lay there motionless, vacant, deserted.

I COULD feel the eyes of the men on me. My decision must be delayed no further.

"We will land, Mr. Correy," I said grimly. "Near the two ships, please."

"Very well, sir," nodded Correy, and spoke briefly into the microphone.

"I might warn you, sir," said Dival quietly, "to govern your activities, once outside; free from the gravity pads of the ship, on a body of such small size, an ordinary step will probably cause a leap of considerable distance."

"Thank you, Mr. Dival. That is a consideration I had overlooked. I shall warn the men. We must—"

At that instant I felt the slight jar of landing. I glanced up; met Correy's grave glance squarely.

"Grounded, sir," he said quietly.

"Very good, Mr. Correy. Keep the ship ready for instant action, please, and call the landing crew to the forward exit. You will accompany us, Mr. Dival?"

"Certainly, sir!"

"Good. You understand your orders, Mr. Correy?"

"Yes, sir!"

"I returned his salute, and led the way out of the room, Dival close on my heels.

THE landing crew was composed of all men not at regular stations; nearly half of the *Kalid's* entire crew. They were equipped with the small atomic power pistols as side-arms, and there were two three-men disintegrator ray squads. We all wore menores, which were unnecessary in the ship, but decidedly useful outside. I might add that the menore of those days was not the delicate, beautiful thing that it is to-day; it was a comparatively crude and clumsy band of metal, in which were imbedded the vital units and the tiny atomic energy generator, and was worn upon the head like a crown. But for all its clumsiness, it conveyed and received thought, and, after all, that was all we demanded of it.

I caught a confused jumble of questioning thoughts as I came up, and took command of the situation promptly. It will be understood, of course, that in those days men had not learned to blank their minds against the menore, as they do to-day. It took generations of training to perfect that ability.

"Open the exit," I ordered Kincaide, who was standing by the switch, key in the lock.

"Yes, sir," he thought promptly, and unlocking the switch, released the lever.

The great circular door revolved swiftly, backing slowly on its fine threads, gripped by the massive gimbals which, as at last the ponderous plug of metal freed itself from its threads, swung the circular door aside, like the door of a vault.

FRESH, clean air swept in, and we breathed it gratefully. Science can revitalize air, take out impurities and replace used-up constituents, but it cannot give it the freshness of pure natural air. Even the science of to-day.

"Mr. Kincaide, you will stand by with five men. Under no circumstances are you to leave your post until ordered to do so. No rescue parties, under any circumstances, are to be sent out unless you have those orders directly from me. Should any untoward thing happen to this party, you will instantly reseal this exit, reporting at the same time to Mr. Correy, who has his orders. You will not attempt to rescue

us, but will return to the Base and report in full, with Mr. Correy in command. Is that clear?"

"Perfectly," came back his response instantly; but I could sense the rebellion in his mind. Kincaide and I were old friends, as well as fellow officers.

I smiled at him reassuringly, and directed my orders to the waiting men.

"You are aware of the fate of the two ships of the Patrol that have already landed here," I thought slowly, to be sure they understood perfectly. "What fate overtook them, I do not know. That is what we are here to determine.

"It is obvious that this is a dangerous mission. I am ordering none of you to go. Any man who wishes to be relieved from landing duty may remain inside the ship, and may feel it no reproach. Those who do go, should be constantly on the alert, and keep in formation, the usual column of twos. Be very careful, when stepping out of the ship, to adjust your stride to the lessened gravity of this small world. Watch this point!" I turned to Dival, motioned him to fall in at my side. Without a backward glance, we marched out of the ship, treading very carefully to keep from leaping into the air with each step.

Twenty feet away, I glanced back. There were fourteen men behind me—not a man of the landing crew had remained in the ship!

"I am proud of you, men!" I thought heartily; and no emanation from any menore was ever more sincere.

CAUTIOUSLY, eyes roving ceaselessly, we made our way towards the two silent ships. It seemed a quiet, peaceful world; an unlikely place for tragedy. The air was fresh and clean, although, as Dival had predicted, rarefied like the air at an altitude. The willow-like trees that hemmed us in rustled gently, their long, frond-like branches with their rusty green leaves swaying.

"Do you notice, sir," came a gentle thought from Dival, an emanation that could hardly have been perceptible to the men behind us, "that there is no wind—and yet the trees, yonder, are swaying and rustling?"

I glanced around, startled. I had not noticed the absence of a breeze.

I tried to make my response reassuring:

"There is probably a breeze higher up, that doesn't dip down into this little clearing," I ventured. "At any rate, it is not important. These ships are what interest me. What will we find there?"

"We shall soon know," replied Dival. "Here is the *Dorlos;* the second of the two, was it not?"

"Yes." I came to a halt beside the gaping door. There was no sound within, no evidence of life there, no sign that men had ever crossed that threshold, save that the whole fabric was the work of man's hands.

"Mr. Dival and I will investigate the ship, with two of you men," I directed. "The rest of the detail will remain on guard, and give the alarm at the least sign of any danger. You first two men, follow us." The indicated men nodded and stepped forward. Their "Yes, sirs" came surging through my menore like a single thought. Cautiously, Dival at my side, the two men at our backs, we stepped over the high threshold into the interior of the *Dorlos.*

THE *ethon* tubes overhead made everything as light as day, and since the *Dorlos* was a sister ship of my own *Kalid,* I had not the slightest difficulty in finding my way about.

There was no sign of a disturbance anywhere. Everything was in perfect order. From the evidence, it would seem that the officers and men of the *Dorlos* had deserted the ship of their own accord, and—failed to return.

"Nothing of value here," I commented to Dival. "We may as well—"

There was a sudden commotion from outside the ship. Startled shouts rang

through the hollow hull, and a confused medley of excited thoughts came pouring in.

With one accord the four of us dashed to the exit, Dival and I in the lead. At the door we paused, following the stricken gaze of the men grouped in a rigid knot just outside.

Some forty feet away was the edge of the forest that hemmed us in. A forest that now was lashing and writhing as though in the grip of some terrible hurricane, trunks bending and whipping, long branches writhing, curling, lashing out—

"Two of the men, sir!" shouted a non-commissioned officer of the landing crew, as we appeared in the doorway. In his excitement he forgot his menore, and resorted to the infinitely slower but more natural speech. "Some sort of insect came buzzing down—like an Earth bee, but larger. One of the men slapped it, and jumped aside, forgetting the low gravity here. He shot into the air, and another of the men made a grab for him. They both went sailing, and the trees—*look!*"

BUT I had already spotted the two men. The trees had them in their grip, long tentacles curled around them, a dozen of the great willow-like growths apparently fighting for possession of the prizes. And all around, far out of reach, the trees of the forest were swaying restlessly, their long, pendulous branches, like tentacles, lashing out hungrily.

"The rays, sir!" snapped the thought from Dival, like a flash of lightning. "Concentrate the beams—strike at the trunks—"

"Right!" My orders emanated on the heels of the thought more quickly than one word could have been uttered. The six men who operated the disintegrator rays were stung out of their startled immobility, and the soft hum of the atomatic power generators deepened.

"Strike at the trunks of the trees! Beams narrowed to minimum! Action at will!"

The invisible rays swept long gashes into the forest as the trainers squatted behind their sights, directing the long, gleaming tubes. Branches crashed to the ground, suddenly motionless. Thick brown dust dropped heavily. A trunk, shortened by six inches or so, dropped into its stub and fell with a prolonged sound of rending wood. The trees against which it had fallen tugged angrily at their trapped tentacles.

One of the men rolled free, staggered to his feet, and came lurching towards us. Trunk after trunk dropped onto its severed stub and fell among the lashing branches of its fellows. The other man was caught for a moment in a mass of dead and motionless wood, but a cunningly directed ray dissolved the entangling branches around him and he lay there, free but unable to arise.

THE rays played on ruthlessly. The brown, heavy powder was falling like greasy soot. Trunk after trunk crashed to the ground, slashed into fragments.

"Cease action!" I ordered, and instantly the eager whine of the generators softened to a barely discernible hum. Two of the men, under orders, raced out to the injured man; the rest of us clustered around the first of the two to be freed from the terrible tentacles of the trees.

His menore was gone, his tight-fitting uniform was in shreds and blotched with blood. There was a huge crimson welt across his face, and blood dripped slowly from the tips of his fingers.

"*God!*" he muttered unsteadily as kindly arms lifted him with eager tenderness. "They're alive! Like snakes. They—they're *hungry!*"

"Take him to the ship," I ordered. "He is to receive treatment immediately." I turned to the detail that was bringing in the other victim. The man was unconscious, and moaning, but suffering more from shock than any-

thing else. A few minutes under the helio emanations and he would be fit for light duty.

AS the men hurried him to the ship, I turned to Dival. He was standing beside me, rigid, his face very pale, his eyes fixed on space.

"What do you make of it, Mr. Dival?" I questioned him.

"Of the trees?" He seemed startled, as though I had aroused him from deepest thought. "They are not difficult to comprehend, sir. There are numerous growths that are primarily carnivorous. We have the fintal vine on Zenia, which coils instantly when touched, and thus traps many small animals which it wraps about with its folds and digests through sucker-like growths.

"On your own Earth there are, we learn, hundreds of varieties of insectivorous plants: the Venus fly-trap, known otherwise as the Dionaea Muscipula, which has a leaf hinged in the median line, with teeth-like bristles. The two portions of the leaf snap together with considerable force when an insect alights upon the surface, and the soft portions of the catch are digested by the plant before the leaf opens again. The pitcher plant is another native of Earth, and several varieties of it are found on Zenia and at least two other planets. It traps its game without movement, but is nevertheless insectivorous. You have another species on Earth that is, or was, very common: the Mimosa Pudica. Perhaps you know it as the sensitive plant. It does not trap insects, but it has a very distinct power of movement, and is extremely irritable.

"It is not at all difficult to understand a carniverous tree, capable of violent and powerful motion. This is undoubtedly what we have here—a decidedly interesting phenomena, but not difficult of comprehension."

It seems like a long explanation, as I record it here, but emanated as it was, it took but an instant to complete it. Mr. Dival went on without a pause:

"I believe, however, that I have discovered something far more important. How is your menore adjusted, sir?"

"At minimum."

"Turn it to maximum, sir."

I GLANCED at him curiously, but obeyed. New streams of thought poured in upon me. Kincaide . . . the guard at the exit *and something else.*

I blanked out Kincaide and the men, feeling Dival's eyes searching my face. There *was* something else, something—

I focused on the dim, vague emanations that came to me from the circlet of my menore, and gradually, like an object seen through heavy mist, I perceived the message:

"Wait! Wait! We are coming! Through the ground. The trees . . . disintegrate them . . . all of them . . . all you can reach. But not the ground . . . not the ground. . . ."

"Peter!" I shouted, turning to Dival. "That's Peter Wilson, second officer of the *Dorlos!*"

Dival nodded, his dark face alight.

"Let us see if we can answer him," he suggested, and we concentrated all our energy on a single thought: "We understand. We understand."

The answer came back instantly:

"Good! Thank God! Sweep them down, Hanson; every tree of them. Kill them . . . kill them . . . kill them!" The emanation fairly shook with hate. "We are coming . . . to the clearing . . . wait—and while you wait, use your rays upon these accursed hungry trees!"

Grimly and silently, we hurried back to the ship, Dival, the savant, snatching up specimens of earth and rock here and there as we went.

THE disintegrator rays of the portable projectors were no more than toys compared with the mighty beams the *Kalid* was capable of projecting, with her great generators to supply

power. Even with the beams narrowed to the minimum, they cut a swath a yard or more in diameter, and their range was tremendous; although working rather less rapidly as the distance and power decreased, they were effective over a range of many miles.

Before their blasting beams the forest shriveled and sank into tumbled chaos. A haze of brownish dust hung low over the scene, and I watched with a sort of awe. It was the first time I had ever seen the rays at work on such wholesale destruction.

A startling thing became evident soon after we began our work. This world that we had thought to be void of animal life, proved to be teeming with it. From out of the tangle of broken and harmless branches, thousands of animals appeared. The majority of them were quite large, perhaps the size of full-grown hogs, which Earth animal they seemed to resemble, save that they were a dirty yellow color, and had strong, heavily-clawed feet. These were the largest of the animals, but there were myriads of smaller ones, all of them pale or neutral in color, and apparently unused to such strong light, for they ran blindly, wildly seeking shelter from the universal confusion.

STILL the destructive beams kept about their work, until the scene changed utterly. Instead of resting in a clearing, the *Kalid* was in the midst of a tangle of fallen, wilting branches that stretched like a great, still sea, as far as the eye could see.

"Cease action!" I ordered suddenly. I had seen, or thought I had seen, a human figure moving in the tangle, not far from the edge of the clearing. Corey relayed the order, and instantly the rays were cut off. My menore, free from the interference of the great atomic generators of the *Kalid*, emanated the moment the generators ceased functioning.

"Enough, Hanson! Cut the rays; we're coming."

"We have ceased action; come on!"

I hurried to the still open exit. Kincaide and his guards were staring at what had been the forest; they were so intent that they did not notice I had joined them—and no wonder!

A file of men were scrambling over the debris; gaunt men with dishevelled hair, practically naked, covered with dirt and the greasy brown dust of the disintegrator ray. In the lead, hardly recognizable, his menore awry upon his tangled locks, was Peter Wilson.

"Wilson!" I shouted; and in a single great leap I was at his side, shaking his hand, one arm about his scarred shoulders, laughing and talking excitedly, all in the same breath. "Wilson, tell me—in God's name—what has happened?"

HE looked up at me with shining, happy eyes, deep in black sockets of hunger and suffering.

"The part that counts," he said hoarsely, "is that you're here, and we're here with you. My men need rest and food—not too much food, at first, for we're starving. I'll give you the story—or as much of it as I know—while we eat."

I sent my orders ahead; for every man of that pitiful crew of survivors, there were two eager men of the *Kalid's* crew to minister to him. In the little dining salon of the officers' mess, Wilson gave us the story, while he ate slowly and carefully, keeping his ravenous hunger in check.

"It's a weird sort of story," he said. "I'll cut it as short as I can. I'm too weary for details.

"The *Dorlos*, as I suppose you know, was ordered to L-472 to determine the fate of the *Filanus*, which had been sent here to determine the feasibility of establishing a supply base here for a new interplanetary ship line.

"It took us nearly three days, Earth time, to locate this clearing and the *Filanus*, and we grounded the *Dorlos* immediately. Our commander—you probably remember him, Hanson:

David McClellan? Big, red-faced chap?"

I nodded, and Wilson continued.

"Commander McClellan was a choleric person, as courageous a man as ever wore the blue and silver of the Service, and very thoughtful of his men. We had had a bad trip; two swarms of meteorites that had worn our nerves thin, and a faulty part in the air-purifying apparatus had nearly done us in. While the exit was being unsealed, he gave the interior crew permission to go off duty, to get some fresh air, with orders, however, to remain close to the ship, under my command. Then, with the usual landing crew, he started for the *Filanus*.

"He had forgotten, under the stress of the moment, that the force of gravity would be very small on a body no larger than this. The result was that as soon as they hurried out of the ship, away from the influence of our own gravity pads, they hurtled into the air in all directions."

WILSON paused. Several seconds passed before he could go on.

"Well, the trees—I suppose you know something about them—reached out and swept up three of them. McClellan and the rest of the landing crew rushed to their rescue. They were caught up. *God!* I can see them . . . hear them . . . even now!

"I couldn't stand there and see that happen to them. With the rest of the crew behind me, we rushed out, armed only with our atomic pistols. We did not dare use the rays; there were a dozen men caught up everywhere in those hellish tentacles.

"I don't know what I thought we could do. I knew only that I must do something. Our leaps carried us over the tops of the trees that were fighting for the . . . the bodies of McClellan and the rest of the landing crew. I saw then, when it was too late, that there was nothing we could do. The trees . . had done their work. They they were *feeding*. . . .

"Perhaps that is why we escaped. We came down in a tangle of whipping branches. Several of my men were snatched up. The rest of us saw how helpless our position was . . . that there was nothing we could do. We saw, too, that the ground was literally honeycombed, and we dived down these burrows, out of the reach of the trees.

"There were nineteen of us that escaped. I can't tell you how we lived—I would not if I could. The burrows had been dug by the pig-like animals that the trees live upon, and they led, eventually, to the shore, where there was water — horrible, bitter stuff, but not salty, and apparently not poisonous.

WE lived on these pig-like animals, and we learned something of their way of life. The trees seem to sleep, or become inactive, at night. Not unless they are touched do they lash about with their tentacles. At night the animals feed, largely upon the large, soft fruit of these trees. Of course, large numbers of them make a fatal step each night, but they are prolific, and their ranks do not suffer.

"Of course, we tried to get back to the clearing, and the *Dorlos;* first by tunneling. That was impossible, we found, because the rays used by the *Filanus* in clearing a landing place had acted somewhat upon the earth beneath, and it was like powder. Our burrows fell in upon us faster than we could dig them out. Two of my men lost their lives that way.

"Then we tried creeping back by night; but we could not see as can the other animals here, and we quickly found that it was suicide to attempt such tactics. Two more of the men were lost in that fashion. That left fourteen.

"We decided then to wait. We knew there would be another ship along, sooner or later. Luckily, one of the men had somehow retained his menore. We treasured that as we treasured our

lives. To-day, when, deep in our runways beneath the surface, we felt, or heard, the crashing of the trees, we knew the Service had not forgotten us. I put on the menore; I—but I think you know the rest, gentlemen. There were eleven of us left. We are here—all that is left of the *Dorlo's* crew. We found no trace of any survivor of the *Filanus;* unaware of the possibility of danger, they were undoubtedly all the victims of . . . the trees."

Wilson's head dropped forward on his chest. He straightened up with a start and an apologetic smile.

"I believe, Hanson," he said slowly, "I'd better get . . . a little . . . rest," and he slumped forward on the table in the death-like sleep of utter exhaustion.

THERE the interesting part of the story ends. The rest is history, and there is too much dry history in the Universe already.

Dival wrote three great volumes on L-472—or Ibit, as it is called now. One of them tells in detail how the presence of constantly increasing quantities of volcanic ash robbed the soil of that little world of its vitality, so that all forms of vegetation except the one became extinct, and how, through a process of development and evolution, those trees became carniverous.

The second volume is a learned discussion of the tree itself; it seems that a few specimens were spared for study, isolated on a peninsula of one of the continents, and turned over to Dival for observation and dissection. All I can say for the book is that it is probably accurate. Certainly it is neither interesting nor comprehensible.

And then, of course, there is his treatise on ocrite: how he happened to find the ore, the probable amount available on L-472—or Ibit, if you prefer—and an explanation of his new method of refining it. I saw him frantically gathering specimens while we were getting ready to leave, but it wasn't until after we had departed that he mentioned what he had found.

I HAVE a set of these volumes somewhere; Dival autographed them and presented me with them. They established his position, I understand, in his world of science, and of course, the discovery of this new source of ocrite was a tremendous find for the whole Universe; interplanetary transportation wouldn't be where it is to-day if it were not for this inexhaustible source of power.

Yes, Dival became famous—and very rich.

I received the handshakes and the gratitude of the eleven men we rescued, and exactly nine words of commendation from the Chief of my squadron: *"You are a credit to the Service, Commander Hanson!"*

Perhaps, to some who read this, it will seem that Dival fared better than I. But to men who have known the comradeship of the outer space, the heart-felt gratitude of eleven friends is a precious thing. And to any man who has ever worn the blue and silver uniform of the Special Patrol Service, those nine words from the Chief of Squadron will sound strong.

Chiefs of Squadrons in the Special Patrol Service—at least in those days—were scanty with praise. It may be different in these days of soft living and political pull.

Marooned Under the Sea

By Paul Ernst

> Three men stick out a strange and desperate adventure among the incredible monsters of the dark sea floor.

. . . YACHT, *Rosa*, was due to leave the San Francisco harbor in two hours.

We were going on some mysterious cruise to the South Seas, the details of which I did not know.

"Professor George Berry, the famous zoologist, and myself are going to do some exploring that is hazardous in the extreme," Stanley had said. "For purely mechanical reasons we need a third. You are young and have no family ties, so I thought I'd ask you to go with us.

(Editor's Note. This document, written on a curious kind of parchment and tied to a piece of driftwood, was reported to have been picked out of the sea near the Fiji Islands. The first and last pages were so water soaked as to be indecipherable.)

"Look at the cattle!" called Stanley.

I'd rather not tell you what it's all about until we are on our way."

That was all the explanation he had given. It was sufficient. I was fed up with life just then: I had enough money to avoid work and was tired of playing.

"I must warn you that you'll risk your life in this," he had continued, in answer to my acceptance of his invitation.

And I had replied that the hazard, whatever it might be, only made the trip appear more desirable.

So here I was, on board the yacht, about to sail for far places on some scientific mission which had so far been kept veiled in secrecy and which was represented as "hazardous in the extreme." It sounded attractive!

STANLEY came aboard accompanied by a lean, wiry man with iron gray hair and cool, alert black eyes.

"Hello, Martin," Stanley greeted me. "I want you to meet Professor Berry, the real leader of this expedition. Professor, this young red-head is Martin Grey, a sort of nephew by adoption who knows more about night life than most cabaret proprietors—and not much of anything else. He has shaken the dangers of the gold-diggers to face with us the dangers of the tropic seas."

The professor gripped my hand, and his cool black eyes gazed into mine with a kind of friendly frostiness.

"Don't pay any attention to him," he advised me. "Twenty years ago, when I first met him, he was on his way to Africa to shoot elephants because some revue beauty had just thrown him over and he felt he ought to do something big and heroic about it. It was shortly afterward that he decided to stay a bachelor all his life, and became such a confirmed woman hater."

He smiled thinly at Stanley's prod in the ribs, and the two went below, talking and laughing with the intimacy of old friendship.

I stayed on deck and soon found myself watching, with no little wonder, an enormous truck and trailer arrangement that drew up on the dock heavily loaded with a single immense crate. It was for us. I speculated as to what it could possibly contain.

It was a twenty or twenty-five-foot cube solidly braced with strap-iron and steel brackets. It evidently contained something fragile. The yacht's donkey engine lowered a hook for it, and swung it over the side and into the hold as daintily as though it had been packed with explosives.

The last of the ship's stores followed it over the side; the group of newspaper reporters who had been trying to pump the captain and first mate for a story were warned to leave, and we were ready to go. Precisely where and for what purpose?

I was to find out almost immediately.

Even as the yacht nosed superciliously away from the dock, the steward approached me with the information that lunch was ready. I went to the small, compactly furnished dining salon, where I was joined by Stanley and the professor.

THERE were only the three of us at the table: Stanley Browne, noted big game hunter and semi-retired owner of the great Browne Glassworks at Altoona, a man fifteen years my senior but tanned and fit looking; Professor Berry, well known in scientific circles; and myself, known in no branch of activity save the one Stanley had jested about—the night life of my home city, Chicago.

"It's time you knew just what you're up against," said Stanley to me after the consomme had been served. "Now that we've actually sailed, there's no longer any need for secrecy. Indeed there never has been urgent need of it: the Professor and myself merely thought we might provoke incredulity and comment if we stated the purpose of our trip publicly."

He buttered a roll.

"We—the Professor and you and I—are going in for some deep sea diving. And when I say deep, I mean deep. We are going to investigate conditions as they exist one mile down from the surface of the ocean."

"A mile!" I exclaimed. "Why—"

There I stopped. I had only a layman's knowledge of such matters. But I knew that the limit of man's submersion, till then at any rate, was a matter of a few hundred feet.

"Sounds incredible, doesn't it," said Stanley with a smile. "But that's what we're going to do—if the Professor's gadget works as he seems to think it will."

"I don't think it, I know it," retorted the Professor. "And man, man, the things we may see down there! New and unknown species—a world no human has ever seen before—perhaps the secret of all of life—"

"Dragons, sea-serpents and what not!" Stanley finished with a grin.

"Or, possibly—nothing at all." The

Professor shrugged. "I mustn't let my scientific curiosity run away with me. Perhaps we'll find no new thing down down. Our deep sea dredging and classification may already embrace most of the forms of life in the greater depths."

"If it does I want my money back," said Stanley. "When you asked me to finance this expedition for you, I agreed on condition that you would show me a thrill—some *real* big game, even if I would not be able to shoot it. If we draw blank—"

"THE mere descent should satisfy you, my adventuring friend," replied the Professor brusquely. "I think you'll find that thrilling enough."

"But—a mile under the surface!" I marveled, feeling not entirely comfortable. "The pressure! Enormous! It can't be done! That is, I mean, can it be done?"

"It had better be," said Stanley with a humor that I did not entirely appreciate. "If it isn't, the three of us are going to be pressed out like three sheets of tissue paper! For we are assuredly going down that far in the Professor's gadget."

"Was that the thing I saw hoisted aboard just before we left?"

"That was it. We'll stroll around after lunch and look it over."

If I had taken this cruise in search of distraction—I was surely going to be successful! That was plain!

"Just where are we going?" I asked. "You said something about the South Seas, but you've named no special part of them."

"We're bound for Penguin Deep. That's a delightful little dimple in the Kermadec Trough, which," Stanley explained, "is north northeast of New Zealand almost halfway up to the Fiji Islands. Penguin Deep is ticketed at five thousand one hundred and fifty feet, but it probably runs deeper in spots."

The rest of the meal was consumed in silence. I hardly tasted what I ate; I remember that. Over five thousand feet down—where no man had ever ventured before! Could we make it?

I tried to recall my neglected physics lessons and compute the pressure that far down. I couldn't. But I knew it must be an appalling total of tons to the square inch. What possible arrangement could they have brought in which to make that awful descent?

And, if the descent were accomplished, what in the world would we see when we got down there? Gigantic, hitherto unknown fishes? Marine growths, half animal and half vegetable?

Decidedly, hot rolls and salad, cutlets and baked potatoes, good as they were, could not distract attention from the crowding questions that assailed me. And I could see that Stanley and the Professor were also far away in their thoughts—probably already exploring Penguin Deep.

AFTER lunch we went forward to look at the Professor's gadget, as Stanley insisted on calling it.

It had been carefully unpacked by the crew while we ate, and it shimmered in the electric lighted hold like a great bubble.

It was a giant glass sphere, polished and flawless. Inside it could be made out various objects—a circular bench arrangement on a wooden flooring, batteries that filled the cup between the floor and the bottom arc of the sphere, tall metal cylinders, a small searchlight set next to a mechanism that was indeterminate. At three equidistant points on the sides there were glass handles, as thick as a man's thigh, cast integral with the walls. On the top there was a smaller handle.

At first glance the sphere seemed all in one piece, with the central objects cast inside like a toy ship in a sealed bottle. Then a mathematically precise ring of prismatic reflections showed me that the top third of the ball was a separate piece, fitting conically down like the tapered glass stopper of a monstrous perfume bottle. The handle

on the top was for the purpose of lifting this giant's teapot lid, and allowing entrance into the sphere.

"Isn't it a beauty?" murmured Stanley. "It ought to be," he added. "It cost me eighty-six thousand to make it in my own glass factory. Eleven castings before this one came along that was reasonably free of flaws. Twenty-two feet six inches over all, walls five feet thick, new formula unbreakable glass, four men working a month to grind the lid into place, tolerance limits plus or minus zero."

He slapped the Professor's shoulders. "Let's go in and look over the apparatus."

TO accommodate the huge ball a well had been constructed in the Rosa's hold. This brought the deck we were standing on up to within six feet of the top ring, above which was rigged a chain hoist for lifting the ponderous lid.

The hoist was revolved, the conical top was swung free, and we clambered into our unique diving shell.

The tall cylinders were revealed as great flasks of compressed air. The indeterminate thing beside the searchlight turned out to be a hand pump, geared to work against heavy pressure. From the suction chamber of this three tubes extended.

"We inhale the air of the chamber," the Professor explained to me, "and exhale through the tubes into the pump cylinder. Breathe in through the nose and out through the mouth. The pump piston is forced down by this geared handle, sending the used air out of the shell through this sixteenth-inch hole. A ball check valve keeps the water from squirting in when the exhaust pressure is released."

He pointed to a telegraphic key which completed a circuit from the batteries in the bottom of the ball to a thread of copper cast through the lid.

"That's your plaything, Martin. You are to raise or lower us by pressing that key. It controls the donkey engine electrically, so that we guide our own destinies though we are a mile beneath our power plant. Stanley works the pump. I direct the searchlight, write down notes, and, I sincerely hope, take snapshots of deep sea life."

For a moment my part of the labor seemed so easy as to be unfair. Merely to sit there and punch a little key at raising and lowering time! But as I thought it over it began to appear more difficult.

The *Rosa* could not anchor, of course, in a mile of water. We would drift helplessly. If we approached an undersea cliff I must raise us at once to prevent us being smashed against it. And if the cliff were too lofty to be cleared in time. . . .

I mentioned this to the Professor.

"That would be unfortunate," he said, with his frosty smile. "Stanley assures us this glass is unbreakable. He means commercially unbreakable. What would happen to it if it were submitted to the strain of being flung against a rock pile—in addition to the enormous stress of the water pressure—I don't know. It's your job to see that we don't have to find out!"

IT had been planned to test the sphere empty first to see how it stood the strain.

We drifted to a full stop over the center of Penguin Deep where we were to gamble our lives in a game with Neptune. Sea anchors were rigged to lessen our drift and the donkey engine was geared to the first cable drum.

There was an impressive row of these drums, each holding an interminable length of three-quarter-inch cable. The bulk of a mile of steel cable has to be seen to be believed!

The glass sphere was lifted from the hold, delicately for all its enormous weight, and swung over the rail preparatory to being lowered into the depths.

Not until that moment did I notice two things: that there was no fastening

of any kind to keep the thick lid in place; and that the three-quarter-inch cable looked like a pack thread in comparison to the ponderous bulk it strained to support.

"We couldn't use a heavier cable," said the Professor, "because of the strain. We're overloading the hoist as it is. As for the lid being fastened down—I think you'll find it will be pressed into place securely enough!"

There was unanimous silence as the great globe slipped into the sea—down and down until the last reflection of the morning sun ceased to shimmer from its surface. Drum after drum was played out, till the first mate held his hand up to check the engineer.

"Five thousand feet, sir," he called to Stanley.

"Haul it back up. And let us hope," Stanley added fervently, "that we'll find the gadget in one piece."

THE engine began to snort rhythmically. Dripping, vibrating, the coils of cable began to crawl back in place on the drums. There was a glint under the surface again as the sunlight reflected on the nearing sphere. The great ball flashed out of the water, and a cheer burst from the throats of all of us. It was absolutely unharmed. Only—there was a beading of fine moisture inside the thick globe. What that could mean, none of us could figure out.

"Difference in temperature?" worried the Professor. "No, it's as cold inside as out. Molecules of water driven by sheer pressure through five feet of glass to unite in drops on the inside? Possibly. Well, there's one way to find out. Stanley, Martin—are you ready?"

We nodded, and prepared to visit the bottom a mile below the *Rosa's* keel. The preparation consisted merely in donning heavy, fleece-lined jumpers to protect us from the cold of the sunless depths.

Soberly we entered the ball to undergo whatever ordeal awaited us on the distant ocean floor. How comparative distance is! A mile walk in the country—it is nothing. A mile ascent in an airplane—a trifle. But a mile descent into pitch black, bone chilling depths of water—that is an immense distance!

Copper wire, on a separate drum, was connected from the engine switch to the copper thread that curled through the glass wall to my telegraphic key. We strapped the mouthpieces of the breathing tubes over our heads, and Browne started the slow turning of the compression pump.

The Professor snapped the searchlight on and off several times to see that it was in working shape. He raised his hand, I pressed the key, and the long descent began.

THAT plunge into the bottomless depths remains in my memory almost as clearly as the far more fantastic adventures that came to us later.

Smoothly, rapidly, the yellow-green of the surface water dimmed to olive. This in turn grew blacker and blacker. Then we were slipping down into pitch darkness—a big bubble lit by a meagre lamp and containing three fragile human beings that dared to trust the soft pulp of their bodies to the crushing weight of the deepest ocean.

The most impressive thing was the utter soundlessness of our descent. At first there had been a pulsing throb of the donkey engine transmitted to us by the sustaining cable. This died as we slid farther from the *Rosa*. At length it was hushed entirely, cushioned by the springy length of steel. There was no stir, no sound of any kind. As far as our senses could tell us, we were hanging motionless in the pressing, awesome blackness.

The Professor switched off our light and turned on the searchlight which he trained downward through the wall at as steep an angle as the flooring would permit. Even then the illusion of motionlessness was preserved. There was nothing in the water to mark our prog-

ress. We might have been floating in a black void of space.

Down and down we went, for an interminable length of time—till at length we reached the abysmal level where the sun never shone and the eyes of man had never gazed till now.

WORDS were made to describe familiar articles. I find now when I am faced with the necessity of portraying events and objects beyond the range of normal human experience that I cannot conjure up words to fit. I despair of trying to make you see what we saw, and feel what we felt.

But try to picture yourself in the glass ball with us:

All is profound blackness save for a streak of white, dying about fifty feet away, which is the beam of our searchlight. Twenty feet below is a bare floor of flinty lava and broken shell. This is unrelieved by sea-weed of any kind, appearing like an imagined fragment of Martian or lunar landscape.

The ball sways idly to the push of some explicable submarine current. It is like being in a captive balloon, except that the connecting cable extends stiffly upward instead of downward.

There is a realization, an instinctive *feel* of awful pressure around you. Logic tells you how you are clamped about, but deeper than logic is the intuition that the glass walls are pressing in on themselves—at the point of collapse. You ears tingle with the feel of it; your head rings with it.

You are breathing in through your nose—thin, unsatisfying gulps of air that cause your lungs to labor at their task; and you are exhaling through your mouth, with difficulty, into the barrel of the powerful pump. No bubbles arise from the tiny hole where the used air is forced into the water. The pressure is too enormous for that. Only a thin, milky line marks its escape from the sphere.

In a ghostly way you see Stanley turning the pump handle. With a handful of waste which he has borrowed from the *Rosa's* engine room, the Professor wipes from the section of wall through which the searchlight plays the moisture that constantly collects there. I sit with my hand near the key, peering downward and ahead like an engineer in a locomotive cab, ready to raise the shell or lower it as occasion warrants.

And always the suffocating awareness of pressure.

STRANGE and mystic journey as the tortured glass sphere floated over the bottom, following the slow drift of the *Rosa* far above!

The finger of light played along the tilted side of a wrecked tramp steamer. There was a crumpled gash in the bow. From this ragged hole suddenly appeared a great, serpentine form. . . .

The Professor clutched at his camera, pointed it, and clenched his hands in a frenzy of disappointment. The serpent shape had disappeared back into the hull. A little later and we had drifted slowly past the wreck.

"Damn it!" the Professor snatched away his mouthpiece to exclaim. "If we could only *stop*."

The bottom changed character shortly after we had passed the hulk. We began to creep over low, gently rounded mounds.

These were so regular in form that they were puzzling. About fifty feet across and ten in altitude, they looked artificial in their symmetry—like great saucers set on the ocean floor bottom side up. They took on a dirty black hue as our light struck them, and glowed with a faint phosphorescence as they stretched away into the darkness.

A twelve-foot monstrosity, all toad-like head and eyes, swam into the light beam and bumped blindly against the glass ball. For an instant it goggled crazily at us. The Professor took its picture. It blundered away. As it reached the darkness beyond the beam it, too, showed phosphorescent. A belt of blue-white spots like the portholes

of a liner extended down its ugly sides.

Along the bottom, between the curious mounds, writhed a wormlike thing. But it was too huge to be described as truly wormlike—it was eighteen or twenty feet long and a foot thick. It was blood red, almost blunt ended and patently without eyes.

I took my gaze off it for an instant. When I looked again it had disappeared. I blinked at this seeming miracle and then discovered a foot or so of its tail protruding from under the edge of one of the mounds. It was threshing furiously about.

IT was at this instant that I suddenly found increased difficulty, and glanced at Stanley.

He had stopped pumping and was clutching at the Professor's arm with one hand while he pointed down with the other. The Professor motioned him toward the pump, and began to click pictures furiously with the camera pointed at the nearest mound.

Wondering at the urgency of Stanley's gesture and the frantic clicking of the camera shutter, I looked more closely at the curious, saucerlike hump.

Under closer inspection something remarkably like a huge, mud-colored eye was revealed! And as we drifted along, twenty feet away on the farther slope, another appeared!

Paralyzed, I stared at the edges of the thing. They were waving almost imperceptibly up and down, *creeping!*

The mounds were living creatures! Acres and acres of them lying lethargically on the bottom waiting for something to crawl within range of their monstrous edges!

Involuntarily I pressed the key to raise us. But we had gone only a few feet when the Professor called to me.

"Down again, Martin. I don't think these things will bother us unless we scrape against them. Anyway they can't hurt the shell."

I lowered the ball to our former twenty-foot level, and there we swung just over the monsters' backs.

THE Professor had said that the giant inverted saucers would probably not bother us if we did not come in contact with them. It soon became apparent that, in a measure, he was right. The creatures either could not or would not lift their enormous bulks from the sea floor.

A gigantic wriggling thing, all grotesque fringe and tentacles, drifted down into the range of our light. Lower it floated until it hovered just above one of the larger mounds. The Professor got its portrait. At the same instant, as though it had heard the click of the shutter and been frightened by it, the thing dropped another foot—and touched the sloping back.

With the speed of light the inverted saucer became a cup. Like a clenching fist, the cup closed over one of the straggling tentacles.

There followed a tug of war that was all the more ghastly for its soundlessness. The hunted jerked spasmodically to get away from the hunter. So wild were its efforts that several times it raised the monster clear of the bottom for a foot or so. But the grim clutch could not be broken.

Closer and closer it was dragged. Then, after a supreme paroxysm, the tentacle parted and the prey escaped. The tentacle disappeared into the mass of the baffled hunter. It made no attempt to follow the fleeing creature. It slowly relaxed along the bottom and waited for its next meal.

The unearthly incident gave us fresh confidence, convincing us that the monsters did not move unless they were directly touched. Of course we could not foresee the fatal accident that was going to put us within reach of one of the giant saucers.

WE thought for awhile that these great blobs of cold life were the largest creatures of the depths. It was soon made clear to us how mistaken that notion was!

For a time we gazed spellbound at the nightmare assortment of grotes-

queries that gradually assembled around us, attracted no doubt by our light. The things were mainly sightless and of indescribable shape. Most of them were phosphorescent, and they avoided collisions in a way that suggested that they had some buried sense of light perception.

As time passed the Professor emptied his camera, refilled it several times and groaned that he had no more film. Twice as we drifted along I raised us to keep us clear of a gradual upward slope of the smooth floor.

Stanley removed his mouthpiece long enough to suggest that we go back to the surface: we had been submerged for nearly four hours now. But before we could reply a violent movement was felt.

The ball rocked and twirled so that we were forced to cling to the circular bench to avoid being thrown to the floor. It was as though a hurricane of wind had suddenly penetrated the unruffled depths.

"Earthquake?" called Stanley.

"Don't know," answered the Professor. He swung the searchlight in an arc and focussed it at length on something that appeared only as a field of blurred movement. He wiped the moisture from the wall before the lens, and there was revealed to us a sight that makes my heart pound even now when I recall it to memory.

Something vast and serpentine had ventured too near the bottom—and had been caught by the death traps there!

The creature was a writhing mass of gigantic coils. It was impossible even to guess at its length, but its girth was such that the mound-shaped monsters that had fastened to it could not entirely encircle it.

There it twined and knotted, a mighty serpent of the deepest ocean, snapping its awful length and threshing its powerful tail in an effort to dislodge the giant leeches that were flattened against it. And every time it touched the bottom in its blind frenzy, more of the teeming deathtraps attached themselves to it, crawling over their fellows in an effort to find unoccupied areas.

SOON the sea-serpent was a distorted, creeping mass. For one appalling instant its head came into our view. . .

It resembled the head of a crocodile, only it was ten times larger and covered with scale like the armor plate of a destroyer. The jaws, wide open and slashing with enormous, needle-shaped teeth at the huge parasites, were large enough to have held our glass sphere. One eye appeared. It was at least three feet across and of a shimmering amethyst color.

One of the deadly saucers wrapped itself around the great head. The entire mass of attackers and attacked settled slowly to the bottom.

But before it completely succumbed the beaten monster gave one last, convulsive flick of its tail. . . .

"Good God!" cried Stanley, shrinking away from the pump and staring upward.

I followed his gaze with my own eyes.

In the faint reflected glow of the searchlight I could see row on row of large cups flattened against the top of the ball. As I watched these flattened still more and the big sphere quivered perceptibly.

In its death struggle the mighty serpent had flicked one of the huge leeches against us. It now clung there with blind tenacity, covering nearly two-thirds of our shell with the underside of its body.

I reached for the control key to send us to the surface.

"Don't!" snapped the Professor. "The weight—"

He needed to say no more. My hand recoiled as though the key had been red hot.

The three-quarter-inch cable above us was now sustaining, in addition to its own huge weight, our massive glass

ball and the appalling tonnage of this grim blanket of flesh that encircled us. Could it further hold against the strain of lifting that combined tonnage through the press of the water? Almost certainly it could not!

There was nothing we could do but hang there and discover at first hand exactly what happened to things that were clamped in those mighty, living vises!

THE Professor turned on the interior bulb. The result was ghastly. It showed every detail of the belly of the thing that gripped us.

Crowded over its entire under surface were gristly, flattened suckers. Now and then a convulsive ripple ran through its surface tissue and great ridges of flesh stood out. With each squeeze the glass shell quivered ominously as though the extreme limit of its pressure resisting power were being reached—and passed.

"A nice fix," remarked the Professor, his calm, dry voice acting like a tonic in that moment of fear. "If we try to go up, the cable would probably break. If we try to outlast the patience of this thing we might run out of air, or actually be staved in."

He paused thoughtfully.

"I suggest, though, that we follow the latter course for awhile at least. It would be just too bad if that cable broke, gentlemen!"

Stanley shuddered, and looked at the dirty white belly that pressed against the glass walls on all sides.

"I vote we stay here for a time."

"And I," was my addition.

I relieved Stanley at the pump. He and the Professor sat down on the bench. Casting frequent glances at the constricted blanket of flesh that covered us, we prepared to wait as composedly as we might for the thing to give up its effort to smash our shell.

THE hour that followed was longer than any full day I have ever lived through. Had I not confirmed the passage of time by looking at my watch, I would have sworn that at least twenty hours had passed.

Every half minute I gazed at that weaving pattern of cup-shaped suckers only five feet away, trying to see if they were relaxing in their pressure. I attempted to persuade myself that they were. But I knew I was only imagining it. Actually they were pressed as flat as ever, and the sphere still quivered at regular intervals as the heavy body squeezed in on itself. There was no sign that its blind, mindless patience was becoming exhausted.

There was little conversation during that interminable hour.

Stanley grinned wryly once and commented on the creature's disappointment if it actually succeeded in getting at us.

"We'd be scattered all over the surrounding half mile by the pressure of the water," he said. "There'd be nothing left for our pet to feed on but five-foot chunks of broken glass. Not a very satisfying meal."

"We might try to reason with the thing—point out how foolish it is to waste its time on us," I suggested, trying to appear as nonchalant as he was.

The Professor said nothing. He was coolly writing in his notebook, describing minutely the appearance of our abysmal captor.

Finally I chanced to look down through a section of wall not covered by our stubborn enemy. I wiped the moisture from the glass before the searchlight so that I could see more clearly.

THE bottom seemed to be heaving up and down. I blinked my eyes and looked again. It was not an illusion. With a regular dip and rise we were approaching to within a few feet of the rocky floor and moving back up again. Also we were floating faster than at any time previous. The bottom was bare again; we had left the crowding, ominous mounds.

I waved to the Professor. He snapped his notebook shut and stared at the uneasy ocean bottom.

"I've been hoping I was wrong," he said simply. "I thought I felt a wavy motion fifteen minutes ago, and it seemed to me to increase steadily."

The three of us stared at each other.

"You mean . . ." began Stanley with a shudder.

"I mean that the *Rosa*, one mile above us, is having difficulties. A storm. Judging from our movement it must be a hurricane: the length of cable would cushion us from any average wave, and we are rising and falling at least fifteen feet."

"My God!" groaned Stanley. "The *Rosa* is already heeled with the weight of us. She could never weather a hurricane!"

The plight of the crew above our heads was as clear to us as though we had been aboard with them.

Should they cut the cable, figuring that the lives of the three of us were certainly not to be set against the thirty on the yacht?

Should they disconnect the electric control and try to haul us up regardless?

Or should they try to ride out the storm in spite of being crippled by the drag of us?

"I think if I were up there I'd cut us adrift," said Stanley grimly. Both the Professor and myself nodded. "Though," he added hopefully, "my captain is a good gambler. . . ."

THE cable quivered like a live thing under the terrific strain. At each downward swoop, before the upswing began, there was a sickening sag.

"We no longer have a decision to make," said the Professor. "Press the key, Martin, and God grant we can rise with all this dead weight."

And at that instant the crew of the Rosa were also relieved of the necessity for making a decision.

At the bottom of one of those long, sickening falls there was a jerk—and we continued on down to the ocean floor!

The sphere rolled over, jumbling the equipment in a tangled mess with the three of us in the center, bruised and cut. The light snapped off as the battery connections were torn loose.

There we lay at the bottom of Penguin Deep, in an inert sphere that was dead and dark in the surrounding blackness—a coffin of glass to hold us through the centuries. . . .

"MARTIN," I heard the Professor's voice after a time. "Stanley—can either of you move? I'm caught."

"I'm caught, too," came Stanley's gasping answer. "Something on my leg—feels like it's broken."

A heavy object was pressing across my body. With an effort I freed myself and fumbled in the pitch darkness for the other two.

"Lights first," commanded the Professor. "The pump, you know."

I did know! Frantically I scrambled in the dark till I located the batteries. They were right side up and still wired together.

The air grew rapidly foul with no one at the pump. Panting for breath I blundered at the task of connecting the light. After what seemed an eternity I accomplished it.

The light revealed Stanley with an air tank lying across his leg. The mouthpiece of his breathing tube had been forced back over his head, gashing his face in its journey. His face was white with pain.

The Professor was caught under the heavy bench. I freed him and together we attended to Stanley, finding that his leg wasn't broken but only badly bruised.

The mound-shaped monster, dislodged possibly by the fall, was nowhere to be seen.

I resumed work at the pump, the connections of which were so strongly contrived that they had withstood the shock of the upset.

For a moment we were content to rest while the air grew purer. Then we were forced squarely to face our fate.

THE Professor summed up the facts in a few concise words.

"We're certainly doomed! Here at the bottom of Penguin Deep we're as out of reach of help as though we were stranded on the moon. We're as good as dead right now."

"If we have nothing left to hope for," whispered Stanley after a time, "we might as well close the air valves and get it over with at once. No use torturing ourselves. . . ."

The Professor moistened his lips.

"It might be wise." He turned to me. "What's your opinion, Martin?"

But I—I confess I had not the stark courage of these two.

"No! No!" I cried out. "Let's keep on living as long as the air holds out. Something might happen—"

I avoided their eyes as I said it, utterly ashamed of my cowardly quibbling with death. What in the name of God could possibly happen to help us?

The Professor shrugged dully, and nodded.

"I feel with Stanley that we ought to get it over in one short stab. But we have no right to force you. . . ." His voice trailed off.

We readjusted our mouthpieces, I turned automatically at the pump; and we silently awaited the last suffocating moment of our final doom.

AS before, attracted by the light, a strange assortment of deep-sea life wriggled and darted about us, swimming lazily among the looped coils and twists of our cable which had settled down around us.

Among these were certain fish that resembled great porcupines. Spines a foot and a half long, like living knife blades, protected them from the attacks of other species.

They were the only things we saw that were not constantly writhing away from the jaws of some hostile monster—the only things that seemed able to swim about their own affairs without even deigning to watch for danger.

Fascinated, I watched the six-foot creatures. Here were we, reasoning humans, supposed lords of creation, slowly but surely perishing—while only a few feet away one of the lowest forms of life could exist in perfect safety and tranquility!

Then, as I watched them, I seemed to see a difference in some of them.

The majority of them had two fins just behind the gill slits, typical fish tails and blunt, sloping heads. But now and then I saw a spined monster that was queerly unlike its fellows.

Instead of two front fins, these unique ones had two vacant round holes. The head looked as though it had forgotten to grow; its place was taken by an eyeless, projecting, shield shaped cap. And there was no tail.

Glad to find something to distract my half crazed thoughts, I studied the nearest of these.

They moved slower than their tailed and finned brothers, I noticed. I wondered how they could move at all, lacking in any kind of motive power as they seemed to be.

Next instant the secret of their movement was made clear!

OUT of the empty fin holes of the creature I was studying crept two long, powerful looking tentacles. But these were not true tentacles. There were no vacum discs on them, and they moved as though supported by jointed bones—like arms.

The arms ended in flat paddles that resembled hands. These threshed the water in a sort of breast-stroke, propelling the body forward.

Shortly after the arms had appeared, the spiny head cap was cautiously extended a few inches forward from the main shell. Further it was extended as the head of a turtle might slowly appear from the protection of its bony case. And under it—

"Professor!" I screamed wildly. "My God! Look!"

Both the Professor and Stanley merely stared dully at me. I babbled of what I had seen.

"A man! A human looking thing, anyway! Arms and a head! A man inside a fish's spined hide—like armor!"

They looked pityingly at me. The Professor laid his hand on my shoulder.

"Now, now," he soothed, "don't go to pieces—"

"I tell you I saw it!" I shouted. Then, shrinking from the hysterical loudness of my own voice, I lowered my tone. "Something that looks human has occupied some of those prickly, six-foot shells. I saw arms—and a man's head! I swear it!"

"Nonsense! How could a human being stand the cold, the pressure—"

Here I happened to glance at the wall of the shell through which the searchlight shone.

"Look! See for yourself!"

SQUARELY in the rays of the light showed a head, projecting from one of the shells and capped with a wide flat helmet of horned bone.

There were eyes and nose and mouth placed on one side of that head—a face! There were even tabs of flesh or bony protuberances that resembled ears.

"Curious," muttered the Professor, staring. "It certainly looks human enough to talk. But it's only a fish, nevertheless. See—in the throat are gill slits."

"But the eyes! Look at them! They're not the eyes of a fish!"

And they were not. There was in them a light of reason, of intelligence. Those eyes were roaming brightly over us, observing the light, the equipment, seeming to note our amazement as we crowded to look at it.

The sphere rocked slightly. Behind the staring, manlike visitor there was a glimpse of enormous, crocodile jaws and huge, amethyst eyes. Instantly the head and arms receded, leaving an empty-seeming, lifeless shell. An impregnable fortress of spines, the thing drifted slowly away through the twisted loops of cable.

"It certainly looked like—" began Stanley shakily.

"The creature was just a fish," said the Professor shaking his head at the light in Stanley's eyes. "Some sort of giant parasite that inhabits the shells of other fish."

He opened the valve of the last air cylinder and seated himself resignedly on the bench.

"We have another half hour or so—"

All of us suddenly put out our hands to brace ourselves. The sphere had moved.

"Look at the cable!" called Stanley.

We did so. It was moving, writhing away from us over the bottom as though abruptly given life of its own. Coil after coil disappeared into the further gloom.

At length the cable was straight. The ball moved again—was dragged a few feet along the rocky floor.

Something—possessed of incredibly vast power—had seized the end of the steel cable and was reeling us in as a fisherman reels in a trout!

SLOWLY, unsteadily, we slid along the ocean floor. Ahead of us appeared a jagged black wall—a cliff. There was a gloomy hole at its base. Toward this we were being dragged by whatever it was that had caught the end of the cable.

Helpless, we watched ourselves engulfed by the murky den. In the beam of the searchlight we saw that the submarine cavern extended on and on for an unguessable depth. The cable, taut with the strain, stretched ahead out of sight.

Time had been lost track of during that mysterious, ominous journey. It was recalled to us by the state of the air we were breathing.

The Professor removed his mouthpiece and cast the tube aside.

"You might as well stop pumping, Martin," he said quietly. "We're done. There's no more air in the flask."

We stared at each other. Then we shook hands, solemnly, tremulously, taking leave of each other before we departed on that longest of all journeys. . . .

The air in that small space was rapidly exhausted. We lay on the floor, laboring for breath, and closed our eyes. . . .

The Professor, the oldest of the three of us, succumbed first. I heard his breath whistle stertorously, and, glancing at him, saw that he was in a coma. In a moment Stanley had joined him in blessed unconsciousness.

I could feel myself drifting off. . . . Hammers beat at my ears. . . Daggers pierced my heaving lungs. . . .

Hazily I could see scores of the bristly, manlike fish when I opened my eyes and glanced through the walls. It was not one monster then, but many that had brought us to their lair. Abruptly, as though a signal had been given, they all streamed back toward the mouth of the cavern. . . .

My eyesight dimmed. . . . The hammers pulsed louder. . . A veil descended over my senses and I knew no more. . . .

A SOFT, sustained roar came to my ears. Through my closed eyelids I could sense light. A dank, fishy smell came to my nostrils.

I groaned and moved feebly, finding that I was resting on something soft and pleasant.

Dazedly I opened my eyes and sat up. An exclamation burst from me as I suddenly remembered what had gone before, and realized that somehow, incredibly, I was still living.

Feeling like a man who has waked from a nightmarish sleep to find himself in his tomb, I gazed about.

I was in a long, lofty rock chamber, the uneven floor of which was covered with shallow pools of water. The further end was of smooth-grained stone that resembled cement. The near end was rough like the walls; but in it there was a small, symmetrical arch, the mouth of a passage leading away to some other point in the bowels of the earth.

The place was flooded with clear light that had a rosy tinge. From my position on the floor I could not see what made the light. It streamed from a crevice that extended clear around the cave parallel with the floor and about twelve feet above it. From this groove, along with the light, came the soft roaring hiss.

Beside me was the glass ball, the cover off and lying a few feet away from the opening in the top. There was no trace of Stanley or the Professor.

I rose from my couch, a thick, mattresslike affair of soft, pliant hide, and walked feebly toward the small arch in the near end of the cave.

Even as I approached it I heard footsteps, and voices resounded in some slurring, musical language. Half a dozen figures suddenly came into view.

They were men, as human as myself! Indeed, as I gazed at them, I felt inclined to think they were even more human!

THEY were magnificent specimens. The smallest could not have been less than six feet three, and all of them were muscular and finely proportioned. Their faces were arresting in their expression of calm strength and kindliness. They looked like gods, arrayed in soft, thick, beautifully tanned hides in this rosy tinted hole a mile below the ocean's top.

They stared at me for an instant, then advanced toward me. My face must have reflected alarm, for the tallest of them held up his hand, palm outward, in a peaceful gesture.

The leader spoke to me. Of course the slurred, melodious syllable meant nothing to me. He smiled and indi-

cated that I was to follow him. I did so, hardly aware of what I was doing, my brain reeling in an attempt to grasp the situation.

How marvelous, how utterly incredible, to find human beings here! How many were there? Where had they come from? How had they salvaged us from Penguin Deep? I gave it up, striding along with my towering guards like a man walking in his sleep.

At length the low passageway ended, and I exclaimed aloud at what I saw.

I was looking down a long avenue of buildings, all three stories in height. There were large door and window apertures, but no doors nor window panes. In front of each house was a small square with—wonder of wonders!—a lawn of whitish yellow vegetation that resembled grass. In some of the lawns were set artistic fountains of carved rock.

I might have been looking down any prosperous earthly subdivision, save for the fact that the roofs of the houses were the earth itself, which the building walls, in addition to functioning as partitions, served to support. Also earthly subdivisions aren't usually illuminated with rosy light that comes softly roaring from jets set in the walls.

WE were walking toward a more brightly lighted area that showed ahead of us. On the way we passed intersections where other, similar streets branched geometrically away to right and left. These were smaller than the one we were on, indicating that ours was Main Street in this bizarre submarine city.

Faces appeared at door and window openings to peer at me as we passed. And even in that jumbled moment I had time to realize that these folk could restrain curiosity better than we can atop the earth. There was no hubbub, no running out to tag after the queerly dressed foreigner and shout humorous remarks at him.

We approached the bright spot I had noticed from afar. It was an open square, about a city block in area, in the center of which was a royal looking building covered with blazing fragments of crystal and so brilliantly resplendent with light that it seemed to glow at the heart of a pink fire.

I was led toward this and in through a wide doorway. As courteously as though I were a visiting king, I was conducted up a great staircase, down a corridor set with more of the sparkling crystals and into a huge, low room. There my escort bowed and left me.

STILL feeling that I could not possibly be awake and seeing actual things, I glanced around.

In a corner was another of the mattresslike couches made of the thick, soft hide that seemed to be the principal fabric of the place. A few feet away was a table set with dishes of food in barbaric profusion. None of the viands looked familiar but all appealed to the appetite. The floor was strewn with soft skins, and comfortable, carved benches were scattered about.

I walked to the window and looked out. Underneath was a plot of the cream colored grass through which ran a tiny stream. This widened at intervals into clear pools beside which were set stone benches. A hundred yards away was the edge of the square, where the regular, three storied houses began.

While I was staring at this unearthly vista, still unable to think with any coherence, I heard my name called. I turned to face Stanley and the Professor.

BOTH were pale in the rose light, and Stanley limped with the pain of his bruised leg; but both had recovered from their partial suffocation as completely as had I.

"We thought perhaps you'd decided to swim back up to the *Rosa* and leave us to our fates," said Stanley after we had stopped pumping each other's arms and had seated ourselves.

"And I thought—well, I didn't think much of anything," I replied. "I was too busy straining my eyesight over the wonders of this city. Did you ever see anything like it?"

"We haven't seen it at all, save for a view from the windows," said Stanley. "All we know of the place is that a while ago we woke up in a room like this, only much smaller and less lavish. I wonder why you rate this distinction?"

I described the streets as I had seen them. (It is impossible for me to think of them as anything but streets; it would seem as though the rock roof over all would give the appearance of a series of tunnels; but I had always the impression of airiness and openness.)

"Light and heat are furnished by natural gas," said the Professor when I remarked on the perfection of these two necessities. "That's what makes the low roaring noise—the thousands of burning jets. But the presence of gas here isn't as unusual as the presence of air. Where does that come from? Through wandering underground mazes from some cave mouth in the Fiji Islands to the north? That would indicate that all the earth around here is honeycombed like a gigantic section of sponge. I wonder—"

"Have you any idea how we were rescued?" I interrupted, a little impatient of his abstract scientific ponderings.

"We have," said Stanley. "A woman told us. We woke up to find her nursing us—gorgeous looking thing—finest woman I've ever seen, and I've seen a good many—"

"She didn't exactly 'tell' us," remarked the Professor with his thin smile. Women were only interesting to him as biological studies. "She drew a diagram that explained it.

"That tunnel, Martin, was like the outer diving chamber of a submarine. We were hauled in on a big windlass—driven by gas turbines, I think. Once we were inside, a twenty-yard, counterbalanced wall of rock was lowered across the entrance. Then the water was drained out through a well and into a subterranean body of water that extends under the entire city. And here we are."

We fell silent. Here we were. But what was going to happen to us among these friendly-seeming people; and how—if ever—we were going to get back to the earth's surface, were questions we could not even try to answer.

WE ate of the appetizing food laid out on the long table. Shortly afterward we heard steps in the corridor outside the room.

A woman entered. She was ravishingly beautiful, tall, slender but symmetrically rounded. A soft leather robe slanted upward across her breast to a single shoulder fastening, and ended just above her knees in a skirt arrangement. Around her head was a regal circlet of silvery gray metal with a flashing bit of crystal set in the center above her broad, low forehead.

She smiled at Stanley who looked dazzled and smiled eagerly back.

She pointed toward the door, signifying that we were to go with her. We did so; and were led down the great staircase and to a huge room that took up half the ground floor of the building. And here we met the nobility of the little kingdom—the upper class that governed the immaculate little city.

They were standing along the walls, leaving a lane down the center of the room—tall, finely modelled men and women dressed in the single garments of soft leather. There were people there with gray hair and wisdom wrinkled faces; but all were alike in being erect of body, firm of bearing and in splendid health.

They stopped talking as we entered the big room. Our gaze strayed ahead down the lane toward the further wall.

Here was a raised dais. On it was a gleaming, crystal encrusted throne. And occupying it was the most

queenly, exquisitely beautiful woman I had ever dreamed about.

WOMAN? She was just a girl in years in spite of her grave and royal air. Her eyes were deep violet. Her hair was black as ebony and gleaming with sudden glints of light. Her skin—

But she cannot be described. Only a great painter could give a hint of her glory. Too, I might truthfully be described as prejudiced about her perfections.

The Queen, for patently she was that, bowed graciously at us. It seemed to me—though I told myself that I was an imaginative fool—that her eyes rested longest on me, and had in them an expression not granted to the Professor or Stanley.

She spoke to us, a melodious sentence or two, and waved her beautiful hand in which was a short ivory wand, evidently a scepter.

"She's probably giving us the keys to the city," whispered Stanley. He edged nearer the fair one who had conducted us. "I sincerely hope there's room here for us."

The open lane closed in on us. Men and women crowded about us, speaking to us and smiling ruefully as they realized we could not understand. I noticed that, for some curious reason, they seemed fascinated by the color of my hair. Red-haired men were evidently scarce there.

At length the beauty who had so captured Stanley's fancy, and who seemed to have been appointed a sort of mentor for us, suggested in sign language that we might want to return to our quarters.

It was a welcome suggestion. We were done in by the experiences and emotions that had gripped us since leaving the *Rosa* such an incredibly few hours ago.

We went back to the second floor, I to my luxurious big apartment and Stanley and the Professor to their smaller but equally comfortable rooms.

A PLEASANT period slid by, every waking hour of which was filled with new experiences.

The city's name, we found, was Zyobor. It was a perfect little community. There were artisans and thinkers, artists and laborers—all alike in being physically perfect beyond belief and cultured as no race on top the ground is cultured.

As we began to learn the language, more exact details of the practical methods of existence were revealed to us.

The surrounding earth furnished them with building materials, metals and unlimited gas. The sea, so near us and yet so securely walled away, gave them food. Which warrants a more detailed description.

We were informed that the manlike, two-armed fishes were the servants of these people—domesticated animals, in a sense, only of an extremely high order of intelligence. They were directed by mental telephathy. (Every man, woman and child in Zyobor was skilled at thought projection. They conversed constantly, from end to end of the city, by mental telepathy.)

Protected in their spined shells, which they captured from the schools of porcupine fish that swarmed in Penguin Deep, they gathered sea vegetation from the higher levels and trapped sea creatures. These were brought into the subterranean chamber where our glass ball now reposed. Then the chamber was emptied of water and the food was borne to the city.

The vast army of mound-fish provided the bulk of the population's food, and also furnished the thick, pliant skin they used for clothing and drapes. They were cultivated as we cultivate cattle—an ominous herd, to be handled with care and approached by the fish-servants with due caution.

Thus, with all reasonable wants satisfied, with talent and brains to design beautiful surroundings, lighted and warmed by inexhaustible natural gas, these fortunate beings lived their shel-

tered lives in their rosy underground world.

At least I thought their lives were sheltered then. It was only later, when talking to the beautiful young Queen, that I learned of the dread menace that had begun to draw near to them just a short time before we were rescued. . . .

MY first impression, when we had entered the throne room that first day, that the Queen had regarded me more intently than she had Stanley or the Professor, had been right. It pleased her to treat me as an equal, and to give me more of her time than was granted to any other person in the city.

Every day, for a growing number of hours, we were together in her apartment. She personally instructed me in the language, and such was my desire to talk to this radiant being that I made an apt pupil.

Soon I had progressed enough to converse with her—in a stilted, incorrect way—on all but the most abstract of subjects. It was a fine language. I liked it, as I liked everything else about Zyobor. The upper earth seemed far away and well forgotten.

Her name, I found, was Aga. A beautiful name. . . .

"How did your kingdom begin?" I asked her one day, while we were sitting beside one of the small pools in the gardens. We were close together. Now and then my shoulder touched hers, and she did not draw away.

"I know not," she replied. "It is older than any of our ancient records can say. I am the three hundred and eleventh of the present reigning line."

"And we are the first to enter thy realm from the upper world?"

"Thou art the first."

"There is no other entrance but the sea-way into which we were drawn?"

"There is no other entrance."

I WAS silent, trying to realize the finality of my residence here.

At the moment I didn't care much if I never got home!

"In the monarchies we know above," I said finally, avoiding her violet eyes, "it is not the custom for the queen—or king—to reign alone. A consort is chosen. Is it not so here? Hast thou not, among thy nobles, some one thou hast destined—"

I stopped, feeling that if she dismissed me in anger and never spoke to me again the punishment would be just.

But she wasn't angry. A lovely tide of color stained her cheeks. Her lips parted, and she turned her head. For a long time she said nothing. Then she faced me, with a light in her eyes that sent the blood racing in my veins.

"I have not yet chosen," she murmured. "Mayhap soon I shall tell thee why."

She rose and hurried back toward the palace. But at the door she paused—and smiled at me in a way that had nothing whatever to do with queenship.

AS the time sped by the three of us settled into the routine of the city as though we had never known of anything else.

The Professor spent most of his time down by the sea chamber where the food was dragged in by the intelligent servant-fish.

He was in a zoologist's paradise. Not a creature that came in there had ever been catalogued before. He wrote reams of notes on the parchment paper used by the citizens in recording their transactions. Particularly was he interested in the vast, lowly mound-fish.

One time, when I happened to be with him, the receding waters of the chamber disclosed the body of one of the odd herdsmen of these deep sea flocks. Then the Professor's elation knew no bounds. We hurried forward to look at it.

"It is a typical fish," puzzled the Professor when we had cut the body out of its usurped armor. "Cold blooded, adapted to the chill and pressure of the deeps. There are the gills I ob-

served before . . . yet it looks very human."

It surely did. There were the jointed arms, and the rudimentary hands. Its forehead was domed; and the brain, when dissected, proved much larger than the brain of a true fish. Also its bones were not those of a mammal, but the cartilagenous bones of a fish. It was not quite six feet long; just fitted the horny shell.

"But its intelligence!" fretted the Professor, glorying in his inability to classify this marvelous specimen. "No fish could ever attain such mental development. Evolution working backward from human to reptile and then fish—or a new freak of evolution whereby a fish on a short cut toward becoming human?" He sighed and gave it up. But more reams of notes were written.

"Why do you take them?" I asked. "No one but yourself will ever see them."

HE looked at me with professorial absent-mindedness.

"I take them for the fun of it, principally. But perhaps, sometime, we may figure out a way of getting them up. My God! Wouldn't my learned brother scientists be set in an uproar!"

He bent to his observations and dissections again, cursing now and then at the distortion suffered by the specimens when they were released from the deep sea pressure and swelled and burst in the atmospheric pressure in the cave.

Stanley was engrossed in a different way. Since the moment he laid eyes on her, he had belonged to the stately woman who had first nursed him back to consciousness. Mayis was her name.

From shepherding the three of us around Zyobor and explaining its marvels to us, she had taken to exclusive tutorship of Stanley. And Stanley fairly ate it up.

"You, the notorious woman hater," I taunted him one time, "the wary bachelor—to fall at last. And for a woman of another world — almost of another planet! I'm amazed!"

"I don't know why you should be amazed," said he stiffly.

"You've been telling me ever since I was a kid that women were all useless, all alike—"

"I find I was mistaken," he interrupted. "They aren't all alike. There's only one Mayis. She is—different."

"What do you talk about all the time? You're with her constantly."

"I'm not with her any more than you're with the Queen," he shot back at me. "What do *you* find to talk about?"

That shut me up. He went to look for Mayis; and I wandered to the royal apartments in search of Aga.

IN the first days of our friendship I had several times surprised in Aga's eyes a curious expression, one that seemed compounded of despair, horror and resignation.

I had seen that same expression in the eyes of the nobles of late, and in the faces of all the people I encountered in the streets—who, I mustn't forget to add here, never failed to treat me with a deference that was as intoxicating as it was inexplicable.

It was as though some terrible fate hovered over the populace, some dreadful doom about which nothing could be done. No one put into words any fears that might confirm that impression; but continually I got the idea that everybody there went about in a state of attempting to live normally and happily while life was still left—before some awful, wholesale death descended on them.

At last, from Aga, I learned the fateful reason.

But first—a confession that was hastened by the knowledge of the fate of the city—I learned from her something that changed all of life for me.

WE were surrounded by the luxury of her private apartment. We sat on a low divan, side by side.

I wanted, more than anything I had ever wanted before, to put my arms around her. But I dared not. One does not make love easily to a queen, the three hundred and eleventh of a proud line.

And then, as maids have done often in all countries, and, perhaps, on all planets, she took the initiative herself.

"We have a curious custom in Zyobor of which I have not yet told thee," she murmured. "It concerns the kings of Zyobor. The color of their hair."

She glanced up at my own carrot-top, and then averted her gaze.

"For all of our history our kings have had—red hair. On the few occasions when the line has been reduced to a lone queen, as in my case, the red-haired men of the kingdom have striven together in public combat to determine which was most powerful and brave. The winner became the Queen's consort."

"And in this case?" I asked, my heart beginning to pound madly.

"In my case, my lord, there is to be no—no striving. When I was a child our only two red-haired males died, one by accident, one by sickness. Now there are none others but infants, none of eligible age. But—by a miracle—thou—"

She stopped; then gazed up at me from under long, gold flecked lashes.

"I was afraid . . I was doomed to die . . . alone. . ."

IT was after I had replied impetuously to this, that she told me of the terror that was about to engulf all life in the beautiful undersea city.

"Thou hast wonder, perhaps, why I should be forward enough to tell thee this instead of waiting for thine own confession first," she faltered. "Know, then—the reason is the shortness of the time we are fated to spend together. We shall belong each to the other only a little while. Then shall we belong to death! And I—when I knew the time was to be so brief—"

And I listened with growing horror to her account of the enemy that was advancing toward us with every passing moment.

ABOUT twenty miles away, in the lowest depression of Penguin Deep, lived a race of monsters which the people of Aga's city called Quabos.

The Quabos were grim beings that were more intelligent than Aga's fish-servants—even, she thought, more intelligent than humans themselves. They had existed in their dark hole, as far as the Zyobites knew, from the beginning of time.

Through the countless centuries they had constructed for themselves a vast series of dens in the rock. There they had hidden away from the deep-sea dangers. They, too, preyed on the mound-fish; but as there was plenty of food for all, the Zyobites had never paid much attention to them.

But—just before we had appeared, there had come about a subterranean quake that changed the entire complexion of matters in Penguin Deep.

The earthquake wiped out the elaborately burrowed sea tunnels of the Quabos, killing half of them at a blow and driving the rest out into the unfriendly openness of the deep.

Now this was fatal to them. They were not used to physical self defense. During the thousands of years of residence in their sheltered burrows they had become utterly unable to exist when exposed to the primeval dangers of the sea. It was as though the civilization softened citizens of New York should suddenly be set down in a howling wilderness with nothing but their bare hands with which to contrive all the necessities of a living.

SUCH was the situation at the time Stanley, the Professor and myself arrived in Zyobor.

The Quabos must find an immediate haven or perish. On the ocean bottom they were threatened by the mound-fish. In the higher levels they were in danger from almost everything that

swam: few things were so defenceless as themselves after their long inertia.

Their answer was Zyobor. There, in perfect security, only to be reached by the diving chamber that could be sealed at will by the twenty-yard, counterbalanced lock, the Quabos would be even more protected than in their former runways.

So—they were working day and night to invade Aga's city!

"But Aga," I interrupted impulsively at this point. "If these monsters are fishes, how could they live here in air—"

I stopped as my objection answered itself before she could reply.

They would not have to live in air to inhabit Zyobor. They would inundate the city—flood that peaceful, beautiful place with the awful pressure of the lowest depths!

That thought, in turn, suggested to me that every building in Zyobor would be swept flat if subjected suddenly to the rush of the sea. The great low cavern, without the support of the myriad walls, would probably collapse—trapping the invading Quabos and leaving the rest without a home once more.

But Aga answered this before I could voice it.

The Quabos had foreseen that point. They were tunneling slowly but surely toward the city from a point about half a mile from the diving chamber. And as they advanced, they blocked up the passageway behind them at intervals, drilled down to the great underground sea that lay beneath all this section, and drained a little of the water away.

IN this manner they lightened, bit by bit, the enormous weight of the ocean depths. When the city was finally reached, not only would it be ensured against sudden destruction but the Quabos themselves would have become accustomed to the difference in pressure. Had they gone immediately from the accustomed press of Penguin Deep into the atmosphere of Zyobor, they would have burst into bits. As it was they would be able to flood the city slowly, without injury to themselves.

"Now thou knowest our fate," concluded Aga with a shudder. "Zyobor will be a part of the great waters. We ourselves shall be food for these monsters. . . ." She faltered and stopped.

"But this cannot be!" I exclaimed, clenching my fists impotently. "There *must* be something we can do; some way—"

"There is nothing to be done. Our wisest men have set themselves sleeplessly to the task of defence. There is no defence possible."

"We can't simply sit here and wait! Your people are wonderful, but this is no time for resignation. Send for my two friends, Aga. We will have a council of war, we four, and see if we can find a way!"

She shrugged despairfully, started to speak, then sent in quest of Stanley and the Professor.

THEY, as well as myself, had had no idea of the menace that crept nearer us with each passing hour. They were dumbfounded, horrified to learn of the peril. We sat awhile in silence, realizing our situation to the full.

Then the Professor spoke:

"If only we could see what these things look like! It might help in planning to defeat them."

"That can be done with ease," said Aga. "Come."

We went with her to the gardens and approached the nearest pool.

"My fish-men are watching the Quabos constantly. They report to me by telepathy whenever I send my thoughts their way. I will let you see, on the pool, the things they are now seeing."

She stared intently at the sheet of water. And gradually, as we watched, a picture appeared—a picture that will never fade from my memory in any smallest detail.

The Quabos had huddled for protection into a large cave at the foot of the cliff outside Zyobor. There were a great many Quabos, and the cave was relatively confining. Now we saw, through the eyes of the spine protected outpost of the Queen, these monstrous refugees crowded together like sheep.

The watery cavern was a creeping mass of viscous tentacles, enormous staring eyes and globular heads. The cave was paved three deep with the horrible things, and they were attached to the walls and roof in solid blocks.

"My God!" whispered Stanley. "There are thousands of them!"

THERE were. And that they were in distress was evident.

The layers on the floor were weaving and shifting constantly as the bottom creatures struggled feebly to rise to the top of the mass and be relieved of the weight of their brothers. Also they were famished. . . .

One of the blood red, gigantic worms floated near the cave entrance. Like lightning the nearest Quabos darted after it. In a moment the prey was torn to bits by the ravenous monsters.

The other side of the story was immediately portrayed to us.

With the emerging of the reckless Quabos, a sea-serpent appeared from above and snapped up three of their number. Evidently the huge serpent considered them succulent tidbits, and made it its business to wait near the cave and avail itself of just such rash chance-taking as this.

While we watched the nightmare scene, a Quabo disengaged itself from the parent mass and floated upward into the clear, giving us a chance to see more distinctly what the creatures looked like.

There was a black, shiny head as large as a sugar barrel. In this were eyes the size of dinner plates, and gleaming with a cold, hellish intelligence. Four long, twining tentacles were attached directly to the head. Dotted along these were rudimentary sucker discs, that had evidently become atrophied by the soft living of thousands of the creature's ancestors.

As though emerging from the pool into which we were gazing, the monster darted viciously at us. At once it disappeared: the fish-servant through whose eyes we were seeing all this had evidently retreated from the approach; although, protected by its spines, it could not have been in actual danger.

"How dost thou know of the tunneling?" I asked Aga. "Thy fish-men cannot be present there, in the rear of the tunnel, to report."

"My artisans have knowledge of each forward move," she answered. "I will show thee."

WE walked back to the palace and descended to a smooth-lined vault. There we saw a great stone shaft sunk down into the rock of the floor. On this was a delicate vibration recording instrument of some sort, with a needle that quivered rhythmically over several degrees of an arc.

"This tells of each move of the Quabos," said Aga. "It also tells us where they will break through the city wall. How near to us are they, Kilor?" she asked an attendant who was studying the dial, and who had bowed respectfully to Aga and myself as we approached.

"They will break into the city in four rixas at the present rate of advance, Your Majesty."

Four rixas! In a little over sixteen days, as we count time, the city of Zyobor would be delivered into the hands—or, rather, tentacles—of the slimy, starving demons that huddled in the cavern outside!

Somberly we followed Aga back to her apartment.

"AS thou seest," she murmured, "there is nothing to be done. We can only resign ourselves to the fate that nears us, and enjoy as much

as may be the few remaining rixas. . . ."

She glanced at me.

The Professor's dry, cool voice cut across our wordless, engrossed communion.

"I don't think we'll give up quite as easily as all that. We can at least *try* to outwit our enemies. If it does nothing else for us, the effort can serve to distract our minds."

He drew from his pocket a sheet of parchment and the stub of his last remaining pencil. His fingers busied themselves apparently idly in the tracing of geometric lines.

"Looking ahead to the exact details of our destruction," he mused coolly, "we see that our most direct and ominous enemy is the sea itself. When the city is flooded, we drown—and later, the Quabos can enter at will."

He drew a few more lines, and marked a cross at a point in the outer rim of the diagram.

"What will happen? The Quabos force through the last shell of the city wall. The water from their tunnel floods into Zyobor. But—and mark me well—*only* the water from the tunnel! The outer end, remember, is blocked off in their pressure-reducing process. The vast body of the sea itself cannot immediately be let in here because the Quabos must take as long a time to re-accustom themselves to its pressure as they did to work out of it."

He spread the parchment sheet before us.

"Is this a roughly accurate plan of the city?" he asked Aga.

She inclined her lovely head.

"And this," indicating the cross, "is the spot where the Quabos will break in?"

Again she nodded, shuddering.

"Then tell me what you think of this," said the Professor.

AND he proceeded to sketch out a plan so simple, and yet so seemingly efficient, that the rest of us gazed at him with wordless admiration.

"My friend, my friend," whispered Aga at last, "thou hast saved us. Thou art the guardian hero of Zyobor—"

"Not too fast, Your Highness," interrupted the Professor with his frosty smile. "I shall be much surprised if this little scheme actually saves the city. We may find the rock so thick there that our task is hopeless—though I imagine the Quabos picked a thin section for help in their own plans."

A vague look came into his eyes.

"I must certainly get my hands on one of these monsters . superhumanly intelligent fish . . . marvelous—akin to the octopus, perhaps?"

He wandered off, changed from the resourceful schemer to the dreamy man of scientific abstractions.

The Queen gazed after him with wonder in her eyes.

"A great man," she murmured, "but is he—a little mad?"

"No, only a little absent-minded," I replied. Then, "Come on, Stanley. We'll round up every able bodied citizen in Zyobor and get to work. I suppose they have some kind of rock drilling machinery here?"

They had. And they strangely resembled our own rock drills: revolving metal shafts, driven by gas turbines, tipped with fragments of the same crystal that glittered so profusely in the palace walls. Another proof that practically every basic, badly needed tool had been invented again and again, in all lands and times, as the necessity for it arose.

With hundreds of the powerful men of Zyobor working as closely together as they could without cramping each others movements, and with the whole city resounding to the roar of the machinery, we labored at the defence that might possibly check the advance of the hideous Quabos.

And with every breath we drew, waking or sleeping, we realized that the cold blooded, in human invaders had crept a fraction of an inch closer in their tunneling.

The Quabos against the Zyobites! Fish against man! Two diametrically

opposed species of life in a struggle to the death! Which of us would survive?

THE hour of the struggle approached. Every soul in Zyobor moved in a daze, with strained face and fear haunted eyes. Their proficiency in mental telepathy was a curse to them now: every one carried constantly, transmitted from the brains of the servant-fish outposts, a thought picture of that outer cavern in the murky depths of which writhed the thousands of crowding Quabos. Each mind in Zyobor was in continual torment.

Spared that trouble, at least, Stanley and the Professor and I walked down to the fortification we had so hastily contrived. It was finished. And none too soon: the vibration indicator in the palace vault told us that only two feet of rock separated us from the burrowing monsters!

The Professor's scheme had been to cut a long slot down through the rock floor of the city to the roof of the vast, mysterious body of water below.

This slot was placed directly in front of the spot in the city wall where the Quabos were about to emerge. As they forced through the last shell of rock, the deluge of water, instead of drowning the city, was supposed to drain down the oblong vent. Any Quabos that were too near the tunnel entrance would be swept down too.

IN silence we approached the edge of the great trough and stared down.

There was a stratum of black granite, fortunately only about thirty feet thick at this point, and then—the depths! A low roar reached our ears from far, far beneath us. A steady blast of ice cold air fanned up against us.

The Professor threw down a large fragment of rock. Seconds elapsed and we heard no splash. The unseen surface was too far below for the noise of the rock's fall to carry on up to us.

"The mystery of this ball of earth on which we live!" murmured the Professor. "Here is this enormous underground body of water. We are far below sea level. Where, then, is it flowing? What does it empty into? Can it be that our planet is honeycombed with such hollows as this we are in? And is each inhabited by some form of life?"

He sighed and shook his head.

"The thought is too big! For, if that were true, wouldn't the seas be drained from the surface of the earth should an accidental passage be formed from the ocean bed down to such a giant river as this beneath us? How little we know!"

THE wild clamor of an alarm bell interrupted his musing. From all the city houses poured masses of people, to form in solid lines behind the large well.

In addition to men, there were many women in those lines, tall and strong, ready to stand by their mates as long as life was left them. There were children, too, scarcely in their teens, prepared to fight for the existence of the race. Every able-bodied Zyobite was mustered against the cold-blooded Things that pressed so near.

The arms of these desperate fighters were pitiful compared to our own war weapons. With no need in the city for fighting engines, none had ever been developed. Now the best that could be had was a sort of ax, used for dissecting the mound-fish, and various knives fashioned for peaceful purposes.

Again the bell clamored forth a warning, this time twice repeated. Every hand grasped its weapon. Every eye went hopefully to the hole in the floor on which our immediate fate depended, then valiantly to the section of wall above it.

This quivered perceptibly. A heavy, pointed instrument broke through; was withdrawn; and a hissing stream of water spurted out.

The Quabos were about to break in upon us!

WITH a crash that made the solid rock tremble, a section of the wall collapsed. It was the top half of the end of the Quabos' tunnel. They had so wrought that the lower half stayed in place — a thing we did not have time to recognize as significant until later.

A solid wall of water, in which writhed dozens of tentacled monsters, was upon us, and we had time for nothing but action.

The ditch had of necessity been placed directly under the Quabos' entrance. The first rush of water carried half over it. With it were borne scores of the cold-blooded invaders.

In an instant we were standing knee deep in a torrent that tore at our footing, while we hacked frantically with knives and axes at the slimy tentacles that reached up to drag us under.

A soft, horrible mass swept against my legs. I was overthrown. A tentacle slithered around my neck and constricted viciously like a length of rotten cable. I sawed at it with the long, notched blade I carried. Choking for air, I felt the pressure relax and scrambled to my knees.

Two more tentacles went around me, one winding about my legs and the other crushing my waist. Two huge eyes glared fiendishly at me.

I plunged the knife again and again into the barrel-shaped head. It did not bleed: a few drops of thin, yellowish liquid oozed from the wounds but aside from this my slashing seemed to make no impression.

In a frenzy I defended myself against the nightmare head that was winding surely toward me. Meanwhile I devoted every energy to keeping on my feet. If I ever went under again—

It seemed to me that the creature was weakening. With redoubled fury I hacked at the spidery shape. And gradually, when it seemed as though I could not withstand its weight and crushing tentacles another second, it slipped away and floated off on the shallow, roaring rapids.

FOR a moment I stood there, catching my breath and regaining my strength. Shifting, terrible scenes flashed before my eyes.

A tall Zyobite and an almost equally stalwart woman were both caught by one gigantic Quabo which had a tentacle around the throat of each. The man and woman were chopping at the viscous, gruesome head. One of the Thing's eyes was gashed across, giving it a fearsome, blind appearance. It heaved convulsively, and the three struggling figures toppled into the water and were swirled away.

The Professor was almost buried by a Quabo that had all four of its tentacles wound about him. As methodically as though he were in a laboratory dissecting room, he was cutting the slippery lengths away, one by one, till the fourth parted and left him free.

A giant Zyobite was struggling with two of the monsters. He had an ax in each hand, and was whirling them with such strength and rapidity that they formed flashing circles of light over his head. But he was torn down at last and borne off by the almost undiminished flood that gushed from the tunnel.

And now, without warning, a heavy soft body flung against my back, and the accident most to be dreaded in that mêlée occurred.

I was knocked off my feet! My head was pressed under the water. On my chest was a mass that was yielding but immovable, soft but terribly strong. Animated, firm jelly! I had no chance to use my knife. My arms were held powerless against my sides.

Water filled my nose and mouth. I strangled for breath, heaving at the implacable weight that pinned me helpless. Bright spots swirled before my eyes. There was a roaring in my ears. My lungs felt as though filled with molten lead. I was drowning. . . .

VAGUELY I felt the pressure loosen at last. An arm—with good, solid flesh and bone in it—slipped under my shoulders and dragged me up into the air.

"Don't you know—can't drown a fish—holding it under water?" panted a voice.

I opened my eyes and saw Stanley, his face pale with the thrill of battle, his chin jutting forward in a berserk line, his eyes snapping with eager, wary fire.

I grinned up at him and he slapped me on the back—almost completing the choking process started by the salt water I'd inhaled.

"That's better. Now—at it again!"

I don't remember the rest of the tumult. The air seemed filled with loathsome tentacles and bright metal blades. It was a confused eternity until the decreased volume of water in the tunnel gave us a respite. . . .

As the tunnel slowly emptied the pressure dropped, and the incoming flood poured squarely into the trough instead of half over it. From that moment there was very little more for us to do.

Our little army—with about a fourth of its number gone—had only to guard the ditch and see that none of the Quabos caught the edges as they hurtled out of their passage.

For perhaps ten minutes longer the water poured from the break in the wall, with now and then a doomed Quabo that goggled horribly at us as it was dashed down the hole in the floor to whatever awesome depths were beneath.

Then the flow ceased. The last oleaginous corpse was pushed over the edge. And the city, save for an ankle-deep sheet of water that was rapidly draining out the vents in the streets, presented its former appearance.

The Zyobites leaned wearily against convenient walls and began telling themselves how fortunate they were to have been spared what seemed certain destruction.

THE Professor didn't share in the general feeling of triumph.

"Don't be so childishly optimistic!" he snapped as I began to congratulate him on the victory his ditch had given us. "Our troubles aren't over yet!"

"But we've proved that we can stand up to them in a hand-to-tentacle fight—"

His thin, frosty smile appeared.

"One of those devils, normally, is stronger than any three men. The only reason all of us weren't destroyed at once is that they were slowly suffocating as they fought. The foot and a half of water we were in wasn't enough to let their gills function properly. Now if they were able to stand right up to us, and not be handicapped by lack of water to breathe . . . I wonder. . . . Is that part of their plan? Is there any way they could manage. . . ?"

"But, Professor," I argued, "it's all over, isn't it? The tunnel is emptied, and all the Quabos are—"

"The tunnel isn't emptied. It's only *half* emptied! I'll show you."

He called Stanley; and the three of us went to the break.

"See," the Professor pointed out to us as we approached the jagged hole, "the Quabos only drilled through the top half of their tunnel ending. That means that the tunnel still has about four feet of water in it—enough to accommodate a great many of the monsters. There may be four or five hundred of them left in there; possibly more. We can expect renewed hostilities at any time!"

"But won't it be just a repetition of the first battle?" remonstrated Stanley. "In the end they'll be killed or will drown for lack of water as these first ones did."

THE Professor shook his head.

"They're too clever to do that twice. The very fact that they kept half their number in reserve shows that they have some new trick to try. Otherwise they'd all have come at once in one supreme effort."

He paced back and forth.

"They're ingenious, intelligent! They're fighting for their very existence. They must have figured out some way of breathing in air, some way of attacking us on a more even basis in case that first rush went wrong. What can it be?"

"I think you're borrowing trouble before it is necessary—" I began, smiling at his elaborate, scientific pessimism. But I was interrupted by a startled shout from Stanley.

"Professor Martin," he cried, pointing to the tunnel mouth. "Look!"

Like twin snakes crawling up to sun themselves, two tentacles had appeared over the rock rim. They hooked over the edge; and leisurely, with grim surety of invulnerability, the barrel-like head of a Quabo balanced itself on the ledge and glared at us.

FOR a moment we stared, paralyzed, at the Thing. And during that moment it squatted there, as undistressed as though the air were its natural element, its gills flapping slowly up and down supplying it with oxygen.

The thing that held us rooted to the spot with fearful amazement was the fantastic device that permitted it to be almost as much at home in air as in water.

Over the great, globular head was set an oval glass shell. This was filled with water. A flexible metal tube hung down from the rear. Evidently it carried a constant stream of fresh water. As we gazed we saw intermittent trickles emerging from the bottom of the crystalline case.

Point for point the creature's equipment was the same as diving equipment used by men, only it was exactly opposite in function. A helmet that enabled a fish to breathe in air, instead of a helmet to allow a man to breate in water!

Stanley was the first of us to recover from the shock of this spectacle. He faced about and raised his voice in shouts of warning to the resting Zyobites. For other glass encased monsters had appeared beside the first, now.

One by one, in single file like a line of enormous marching insects, they crawled down the wall and humped along on their tentacles—around the ditch and toward us!

THE deadly infallibility of that second attack!

The Quabos advanced on us like armored tanks bearing down on defenceless savages. Their glass helmets, in addition to containing water for their breathing, protected them from our knives and axes. We were utterly helpless against them.

They marched in ranks about twenty yards apart, each rank helping the one in front to carry the cumbersome water-hoses which trailed back to the central water supply in the tunnel.

Their movements were slow, weighted down as they were by the great glass helmets, but they were appallingly sure.

We could not even retard their advance, let alone stop it. Here were no suffocating, faltering creatures. Here were beings possessed of their full vigor, each one equal to three of us even as the Professor had conjectured. Their only weak points were their tentacles which trailed outside the glass cases. But these they kept coiled close, so that to reach them and hack at them we had to step within range of their terrific clutches.

The Zyobites fought with the valor of despair added to their inherent noble bravery. Man after man closed with the monstrous, armored Things—only to be seized and crushed by the weaving tentacles.

Occasionally a terrific blow with an ax would crack one of the glass helmets. Then the denuded Quabo would flounder convulsively in the air till it drowned. But there were all too few of these individual victories. The main body of the Quabos, rank on rank, dragging their water-hose be-

hind them, came on with the steadiness of a machine.

SLOWLY we were driven back down the broad street and toward the palace. As we retreated, old people and children came from the houses and went with us, leaving their dwellings to the mercy of the monsters.

A block from the palace we bunched together and, by sheer mass and ferocity, actually stopped the machinelike advance for a few moments. Miscellaneous weapons had been brought from the houses—sledges, stone benches, anything that might break the Quabos' helmets—and handed to us in silence by the noncombatants.

Somebody tugged at my sleeve. Looking down I saw a little girl. She had dragged a heavy metal bar out to the fray and was trying to get some fighter's attention and give it to him.

I seized the formidable weapon and jumped at the nearest Quabo, a ten-foot giant whose eyes were glinting gigantically at me through the distorting curve of the glass.

Disregarding the clutching tentacles entirely, I swung the bar against the helmet. It cracked. I swung again and it fell in fragments, spilling the gallons of water it had contained.

The tentacles wound vengefully around me, but in a few seconds they relaxed as the thing gasped out its life in the air.

I TURNED to repeat the process on another if I could, and found myself facing the Queen. Her head was held bravely high, though the violet of her eyes had gone almost black with fear and repulsion of the terrible things we fought.

"Aga!" I cried. "Why art thou here! Go back to the palace at once!"

"I came to fight beside thee," she answered composedly, though her delicate lips quivered. "All is lost, it seems. So shall I die beside thee."

I started to reply, to urge her again to seek the safety of the palace. But by now the deadly advance of the tentacled demons had begun once more.

Fighting vainly, the population of Zyobor was swept into the palace grounds, then into the building itself.

Men, women and children huddled shoulder to shoulder in the cramping quarters. An ironic picture came to me of the crowding masses of Quabos stuffed into the protection of the outer cave, waiting the outcome of the fight being waged by their warriors. Here were we in a similar circumstance, waiting for the battle to be decided. Though there was little doubt in the minds of any of us as to what the outcome would be.

Guards, the strongest men of the city, were stationed with sledges at the doors and windows. The Quabos, able only to enter one at a time, halted a moment and there was a badly needed breathing spell.

"WE'VE got to find some drastic means of defence," said the Professor, "or we won't last another three hours."

"If you asked me, I'd say we couldn't last another three hours anyway," replied Stanley with a shrug. "These fish have out-thought us!"

"Nonsense! There may still be a way—"

"A brace of machine-guns. I murmured hopefully.

"You might as well wish for a dozen light cannon!" snapped the Professor. "Please try to concentrate, and see if any effective weapon suggests itself to you—something more available at the moment than machine-guns."

In silence the three of us racked our brains for a means of defence. Aga, leaving for a time the task of soothing her more hysterical subjects, came quietly over to us and sat on the bench beside me.

Frankly I could think of nothing. To my mind we were surely doomed. What arms could possibly be contrived at such short notice? What weapon

could be called forth to be effective against the thick glass helmets?

But as I glanced at Stanley I saw his face set in a new expression as his thoughts took a turn that suggested possible salvation.

"Glass," he muttered. "Glass. What destroys it? Sharp blows . . certain acids . . . variation in temperature . . . heat and cold. That's it! *That's it!*"

He turned excitedly to the Queen.

"I think we have it! At least it's worth trying. If there is any tubing around. . . ." He stopped as he realized he was talking in English, and resumed stiltedly in Aga's own language.

"Hast thou, in the palace, any lengths of pipe like to that which the Quabos drag behind them?"

"No. . ." Aga began, her eyes round and wondering. Then she interrupted herself. "Ah, yes! There is! In a vault near that of Kilor's there is a great spool of it. He had it fashioned to carry air for one of his experiments—"

"Come along!" cried Stanley. "I'll explain what I have in mind while we dig up this coil of hose."

A SCORE of Zyobite workmen were gathered at once. The length of hose — made of some linen-like fabric of tough, shredded sea-weed and covered with a flexible metal sheath—was cut into three pieces each about fifty yards long. These were connected to three of the largest gas vents of the palace.

Stanley, the Professor and I each took an end. And we prepared to fight, with fire, the creatures of water.

"It ought to work," Stanley repeated several times as though trying to reassure himself as well as us. "It's simple enough: the water in those helmets is ice cold; if fire is suddenly squirted against them they'll crack with the uneven expansion."

"Unless," retorted the Professor, "their glass has some special heat and cold resisting quality."

Stanley shrugged.

"It may well have some such properties. How such creatures can make glass at all is beyond me!"

Dragging our hose to the big front entrance of the palace, and warning the crowded people to keep their feet clear of it, we prepared to test out the efficiency of this, our last resource against the enemy.

FOR an instant we paused just inside the doorway, looking out at the ugly, glassed-in Things that were massing to attack us again.

The ranks of Quabos had closed in now, till they extended down the street for several hundred yards in close formation—a forest of great pulpy heads with huge eyes that glared unblinkingly at the glittering pink building that was their objective.

"Light up!" ordered Stanley, setting an example by touching his hose nozzle to the nearest wall jet. A spurt of fire belched from his hose, streaming out for four or five feet in a solid red cone. The Professor and I touched off our torches; and we moved slowly out the door toward the ranks of Quabos.

"Don't try to save yourselves from their tentacles," advised Stanley. "Walk right up to them, direct the fire against their helmets, and damn the consequences. If they grip too hard you can always play the torch on their tentacles till they think better of it."

The Quabos' front line humped grimly toward us, unblinking eyes glaring, tentacles writhing warily, little spurts of used water trickling from their helmets.

"Keep together," warned Stanley, "so that if any one of us loses his light he can get it from the hose of one of the other two. And— *Here they come!*"

There was no more time for commands. The Quabos in front, supplied with slack in their hoses by those behind, leaped at us with incredible agility. We fell back a step so that none should get at our backs.

The last stand was begun.

IT was not a battle so much as a series of fierce duels. The Quabos realized their new danger instantly, and devoted all their efforts to extinguishing our torches. We parried and thrust with the flaming hoses in an equally desperate effort to prevent it.

One of them scuttled toward me like a great crab. A tentacle darted toward my right arm. Another was pressed against the nozzle. There was a sickening smell—and the tentacle was jerked spasmodically away.

I caught the hose in my left hand and turned the fiery jet against the water-filled helmet.

A shout of savage exultation broke from my lips. Hardly had the flame touched the glass before it cracked! There was a report like a pistol shot—and a miniature Niagara of water and splintered glass poured at my feet!

The tentacle around my arm tightened, then relaxed. The monster shuddered in a convulsive heap on the ground.

I went toward the next one, swinging the flaring hose in a slow arc as I advanced. The creature lunged at me and threshed at the burning jet with all four of its feelers. But it had been exposed to the air for a long time now. The ghastly tentacles were dry; withered and soft. A touch of the fire seared them unmercifully.

Nevertheless with a swift move it slapped a tentacle squarely down over the hose nozzle. The flame was extinguished as the flame of a candle is pinched out between thumb and forefinger. I retreated.

"Catch!" came a voice behind me.

THE Professor swung his four-foot jet my way. I held my hose to it, and the flame burst out again. A touch at my grisly antagonist's helmet—a sharp crack—the welcome rush of water over the cream colored grass—and another monster was writhing in the death throes!

Keeping close together, the three of us faced the massed Quabos in the palace grounds. Again and again the fiery weapon of one or the other of us was dashed out—to be relighted from the nearest hose. Again and again loud detonations heralded the collapse of more of the invaders.

But it seemed as though their flailing tentacles were as myriad as the stars they had never seen. It seemed as though their numbers would never appreciably diminish. We thrust and parried till our arms grew numb. And still there appeared to be hundreds of the Quabos left.

By order of the Queen three stout Zyobites stepped up to us and relieved us of our exhausting labor. Gladly we handed the hoses to them and went to the palace for a much needed rest.

TWO more shifts of fighters took the flaming jets before the monsters began the retreat slowly back toward their tunnel. And here the Professor took command again.

"We mustn't let them get away to try some new scheme!" he snapped. "Martin, take fifty men and beat them back to the break in the wall. Go around a side street. They move so slowly that you can easily cut off their retreat."

"There isn't any more hose—" began Stanley.

"There's plenty of it. The Quabos brought it with them." The Professor turned to me again. "Take metal-saws with you. Cut sections of the Quabos water-hose and connect them to the nearest wall jets. Run!"

I ran, with fifty of the men of Zyobor close behind me. We dodged out the side of the palace grounds least guarded by the Quabos, ducking between their ranks like infantry men threading through an opposition of powerful but slow-moving tanks. Four of our number were caught, but the rest got through unscathed.

Down a side street we raced, and along a parallel avenue toward the tunnel. As we went I prayed that all the

Quabos had centered their attention on the palace and left their vulnerable water-hoses unguarded.

They had! When we stole up the last block toward the break we found the nearest Quabo was a hundred yards down the street—and working further away with every move.

At once we set to work on the scores of hoses that quivered over the floor with each move of the distant monsters.

AZYOBITE with the muscles of a Hercules swung his ax mightily down on a hose. The metal was soft enough to be sheered through by the stroke. The cut ends were smashed so that they could not be crammed down over the tapering jets; but we could use our metal-saws for cleaner severances at the other ends.

The giant with the ax stepped from hose to hose. Lengths were completed with the saws. A man was placed at each jet to hold the connections in position. Before the Quabos had reached us we had rigged six fire-hoses and had cut through forty or fifty more water-lines.

The end was certain and not long in coming.

We sprayed the monsters with fire as workmen spray fruit trees with insect poison. Stanley, the Professor and a Zyobite came up in the rear with their three hoses.

Caught between the two forces, the beaten fish milled in hopeless confusion and indecision.

In half an hour they were all reduced to huddles of slimy, wet flesh that dotted the pavement from the break back to the palace grounds. The invaders were completely annihilated—and the city of Zyobor was saved!

"Now," said the Professor triumphantly, "we have only to knock out the bottom half of the tunnel wall, empty the tunnel and make sure there are no more Quabos lurking there. After that we can fill it in with solid cement. The Queen can order her fish-servants to guard the outer cave and see that no food gets in to the starving monsters there. The war is over, gentlemen. The Quabos are as good as exterminated at this moment. And I can get back to my zoological work. . . ."

Stanley and I looked at each other. We knew each other's thoughts well enough.

He could resume his companionship with the beautiful Mayis. And I—I had Aga. . . .

WITH the menace of the Quabos banished forever, the city of Zyobor resumed its normal way.

The citizens lowered their dead into the great well we had cut, with appropriate rites performed by the Queen. The daily tasks and pleasures were picked up where they had been dropped. The haunting fear died from the eyes of the people.

Shortly afterward, with great ceremony and celebration, I was made King of Zyobor, to rule by Aga's side. Stanley took Mayis for his wife. He is second to me in power. The Professor is the official wise man of the city.

Life flows smoothly for us in this pink lighted community. We are more than content with our lot here. Our only concern has been the grief that must have been occasioned our relatives and friends when the *Rosa* sailed home without us.

Now we have thought of a way in which, with luck, we may communicate with the upper world. By relays of my Queen's fish-servants we believe we can send up the Professor's invaluable notes* and this informal account of what has happened since we left San Francisco that. . . .

(* Editor's Note: There was no trace of any "notes." The yacht, Rosa, was reported lost with all hands in a hurricane off New Zealand. Aboard her were a Professor George Berry and the owner, Stanley Browne. There is no record, however, of any passenger by the name of Martin Grey. To date no one has taken this document seriously enough to consider financing an expedition of investigation to Penguin Deep.)

The Murder Machine

By Hugh B. Cave

IT was dusk, on the evening of December 7, 1906, when I first encountered Sir John Harmon. At the moment of his entrance I was standing over the table in my study, a lighted match in my cupped hands and a pipe between my teeth. The pipe was never lit.

I heard the lower door slam shut with a violent clatter. The stairs resounded to a series of unsteady footbeats, and the door of my study was flung back. In the opening, staring at me with quiet dignity, stood a young, careless fellow, about five feet ten in height and decidedly dark of complexion. The swagger of his entrance branded him as an adventurer. The ghastly pallor of his face, which was almost colorless, branded him as a man who has found something more than mere adventure.

"Doctor Dale?" he demanded.

"I am Doctor Dale."

He closed the door of the room deliberately, advancing toward me with slow steps.

"My name is John Harmon—Sir John Harmon. It is unusual, I suppose," he said quietly, with a slight shrug, "coming at this late hour. I won't keep you long."

He faced me silently. A single glance at those strained features convinced me of the reason for his coming. Only one thing can bring such a fur-

Four lives lay helpless before the murder machine, the uncanny device by which hypnotic thought-waves are filtered through men's minds to mold them into murdering tools!

tive, restless stare to a man's eyes. Only one thing—fear.

"I've come to you, Dale, because—" Sir John's fingers closed heavily over the edge of the table—"because I am on the verge of going mad."

"From fear?"

"From fear, yes. I suppose it is easy to discover. A single look at me . . . . "

"A single look at you," I said simply, "would convince any man that you are deadly afraid of something. Do you mind telling me just what it is?"

HE shook his head slowly. The swagger of the poise was gone; he stood upright now with a positive effort, as if the realization of his position had suddenly surged over him.

"I do not know," he said quietly. "It is a childish fear—fear of the dark, you may call it. The cause does not matter; but if something does not take this unholy terror away, the effect will be madness."

I watched him in silence for a moment, studying the shrunken outline of his face and the unsteady gleam of his narrowed eyes. I had seen this man before. All London had seen him. His face was constantly appearing in the sporting pages, a swaggering member of the upper set—a man who had been engaged to nearly every beautiful woman in the country—who sought adventure in sport and in night life, merely for the sake of living at top speed. And here he stood before me, whitened by fear, the very thing he had so deliberately laughed at!

"Dale," he said slowly, "for the past week I have been thinking things that I do not want to think and doing things completely against my will. Some outside power—God knows what it is—is controlling my very existence."

He stared at me, and leaned closer across the table.

"Last night, some time before midnight," he told me, "I was sitting alone in my den. Alone, mind you—not a soul was in the house with me. I was reading a novel; and suddenly, as if a living presence had stood in the room and commanded me, I was forced to put the book down. I fought against it, fought to remain in that room and go on reading. And I failed."

"Failed?" My reply was a single word of wonder.

"I LEFT my home; because I could not help myself. Have you ever been under hypnotism, Dale? Yes? Well, the thing that gripped me was something similar—except that no living person came near me in order to work his hypnotic spell. I went alone, the whole way. Through back streets, alleys, filthy dooryards—never once striking a main thoroughfare—until I had crossed the entire city and reached the west side of the square. And there, before a big gray town-house, I was allowed to stop my mad wandering. The power, whatever it was, broke. I—well, I went home."

Sir John got to his feet with an effort, and stood over me.

"Dale," he whispered hoarsely, "what was it?"

"You were conscious of every detail?" I asked. "Conscious of the time, of the locality you went to? You are sure it was not some fantastic dream?"

"Dream! Is it a dream to have some damnable force move me about like a mechanical robot?"

"But. . . . You can think of no explanation?" I was a bit skeptical of his story.

He turned on me savagely.

"I have no explanation, Doctor," he said curtly. "I came to you for the explanation. And while you are thinking over my case during the next few hours, perhaps you can explain this: when I stood before that gray mansion on After Street, alone in the dark, there was murder in my heart. I should have killed the man who lived in that house, had I not been suddenly released from the force that was driving me forward!"

Sir John turned from me in bitterness. Without offering any word of departure, he pulled open the door and stepped across the sill. The door closed, and I was alone.

THAT was my introduction to Sir John Harmon. I offer it in detail because it was the first of a startling series of events that led to the most terrible case of my career. In my records I have labeled the entire case "The Affair of the Death Machine."

Twelve hours after Sir John's departure—which will bring the time to the morning of December 8—the headlines of the Daily Mail stared up at me from the table. They were black and heavy, those headlines, and horribly significant. They were:

FRANKLIN WHITE Jr. FOUND MURDERED
Midnight Marauder Strangles Young Society Man in West End Mansion

I turned the paper hurriedly, and read:

Between the hours of one and two o'clock this morning, an unknown murderer entered the home of Franklin White, Jr., well known West End sportsman, and escaped, leaving behind his strangled victim.

Young White, who is a favorite in London upper circles, was discovered in his bed this morning, where he had evidently lain dead for many hours. Police are seeking a motive for the crime, which may have its origin in the fact that White only recently announced his engagement to Margot Vernee, young and exceedingly pretty French débutante.

Police say that the murderer was evidently an amateur, and that he made no attempt to cover his crime. Inspector Thomas Drake of Scotland Yard has the case.

There was more, much more. Young White had evidently been a decided favorite, and the murder had been so unexpected, so deliberate, that the Mail reporter had made the most of his opportunity for a story. But aside from what I have reprinted, there was only a single short paragraph which claimed my attention. It was this:

The White home is not a difficult one to enter. It is a huge gray town-house, situated just off the square, in After Street. The murderer entered by a low French window, leaving it open.

I have copied the words exactly as they were printed. The item does not call for any comment.

BUT I had hardly dropped the paper before she stood before me. I say "she"—it was Margot Vernee, of course—because for some peculiar reason I had expected her. She stood quietly before me, her cameo face, set in the black of mourning, staring straight into mine.

"You know why I have come?" she said quickly.

I glanced at the paper on the table before me, and nodded. Her eyes followed my glance.

"That is only part of it, Doctor," she said. "I was in love with Franklin—very much—but I have come to you for something more. Because you are a famous psychologist, and can help me."

She sat down quietly, leaning forward so that her arms rested on the table. Her face was white, almost as white as the face of that young adventurer who had come to me on the previous evening. And when she spoke, her voice was hardly more than a whisper.

"Doctor, for many days now I have been under some strange power. Something frightful, that compels me to think and act against my will."

She glanced at me suddenly, as if to note the effect of her words. Then:

"I was engaged to Franklin for more

than a month, Doctor; yet for a week now I have been commanded—commanded—by some awful force, to return to—to a man who knew me more than two years ago. I can't explain it. I did not love this man; I hated him bitterly. Now comes this mad desire, this hungering, to go to him. And last night—"

MARGOT VERNEE hestitated suddenly. She stared at me searchingly. Then, with renewed courage, she continued.

"Last night, Doctor, I was alone. I had retired for the night, and it was late, nearly three o'clock. And then I was strangely commanded, by this awful power that has suddenly taken possession of my soul, to go out. I tried to restrain myself, and in the end I found myself walking through the square. I went straight to Franklin White's home. When I reached there, it was half past three—I could hear Big Ben. I went in—through the wide French window at the side of the house. I went straight to Franklin's room—*because I could not prevent myself from going.*"

A sob came from Margot's lips. She had half risen from her chair, and was holding herself together with a brave effort. I went to her side and stood over her. And she, with a half crazed laugh, stared up at me.

"He was dead when I saw him!" she cried. "Dead! Murdered! That infernal force, whatever it was, had made me go straight to my lover's side, to see him lying there, with those cruel finger marks on his throat—dead, I tell you, I—oh, it is horrible!"

She turned suddenly.

"When I saw him," she said bitterly, "the sight of him—and the sight of those marks—broke the spell that held me. I crept from the house as if I had killed him. They—they will probably find out that I was there, and they will accuse me of the murder. It does not matter. But this power—this awful thing that has been controlling me—is there no way to fight it?"

I nodded heavily. The memory of that unfortunate fellow who had come to me with the same complaint was still holding me. I was prepared to wash my hands of the whole horrible affair. It was clearly not a medical case, clearly out of my realm.

"There is a way to fight it," I said quietly. "I am a doctor, not a master of hypnotism, or a man who can discover the reasons behind that hypnotism. But London has its Scotland Yard, and Scotland Yard has a man who is one of my greatest comrades. . . ."

She nodded her surrender. As I stepped to the telephone, I heard her murmur, in a weary, troubled voice:

"Hypnotism? It is not that. God knows what it is. But it has always happened when I have been alone. One cannot hypnotise through distance. . . ."

AND so, with Margot Vernee's consent, I sought the aid of Inspector Thomas Drake, of Scotland Yard. In half an hour Drake stood beside me, in the quiet of my study. When he had heard Margot's story, he asked a single significant question. It was this:

"You say you have a desire to go back to a man who was once intimate with you. Who is he?"

Margot looked at him dully.

"It is Michael Strange," she said slowly. "Michael Strange, of Paris. A student of science."

Drake nodded. Without further questioning, he dismissed my patient; and when she had gone, he turned to me.

"She did not murder her sweetheart, Dale" he said. "That is evident. Have you any idea who did?"

And so I told him of that other young man, Sir John Harmon, who had come to me the night before. When I had finished, Drake stared at me—stared through me—and suddenly turned on his heel.

"I shall be back, Dale," he said curtly. "Wait for me!"

WAIT for him! Well, that was Drake's peculiar way of going about things. Impetuous, sudden—until he faced some crisis. Then, in the face of danger, he became a cold, indifferent officer of Scotland Yard.

And so I waited. During the twenty-four hours that elapsed before Drake returned to my study, I did my best to diagnose the case before me. First, Sir John Harmon—his visit to the home of Franklin White. Then—the deliberate murder. And, finally, young Margot Vernee, and her confession. It was like the revolving whirl of a pinwheel, this series of events: continuous and mystifying, but without beginning or end. Surely, somewhere in the procession of horrors, there would be a loose end to cling to. Some loose end that would eventually unravel the pinwheel!

It was plainly not a medical affair, or at least only remotely so. The thing was in proper hands, then, with Drake following it through. And I had only to wait for his return.

He came at last, and closed the door of the room behind him. He stood over me with something of a swagger.

"Dale, I have been looking into the records of this Michael Strange," he said quietly. "They are interesting, those records. They go back some ten years, when this fellow Strange was beginning his study of science. And now Michael Strange is one of the greatest authorities in Paris on the subject of mental telegraphy. He has gone into the study of human thought with the same thoroughness that other scientists go into the subject of radio telegraphy. He has written several books on the subject."

Drake pulled a tiny black volume from the pocket of his coat and dropped it on the table before me. With one hand he opened it to a place which he had previously marked in pencil.

"Read it," he said significantly.

I LOOKED at him in wonder, and then did as he ordered. What I read was this:

"Mental telegraphy is a science, not a myth. It is a very real fact, a very real power which can be developed only by careful research. To most people it is merely a curiosity. They sit, for instance, in a crowded room at some uninteresting lecture, and stare continualy at the back of some unsuspecting companion until that companion, by the power of suggestion, turns suddenly around. Or they think heavily of a certain person nearby, perhaps commanding him mentally to hum a certain popular tune, until the victim, by the power of their will, suddenly fulfills the order. To such persons, the science of mental telegraphy is merely an amusement.

"And so it will be, until science has brought it to such a perfection that these waves of though can be broadcast—that they can be transmitted through the ether precisely as radio waves are transmitted. In other words, mental telegraphy is at present merely a mild form of hypnotism. Until it has been developed so that those hyphotic powers can be directed through space, and directed accurately to those individuals to whom they are intended, this science will have no significance. It remains for scientists of to-day to bring about that development."

I closed the book. When I looked up, Drake was watching me intently, as if expecting me to say something.

"Drake," I said slowly, more to myself than to him, "the pinwheel is beginning to unravel. We have found the beginning thread. Perhaps, if we follow that thread. . . ."

Drake smiled.

"If you'll pick up your hat and coat, Dale," he interrupted, "I think we have an appointment. This Michael Strange, whose book you have just enjoyed so immensely, is now residing on a certain quiet little side street about three miles from the square, in London!"

I FOLLOWED Drake in silence, until we had left Cheney Lane in the gloom behind us. At the entrance to the square my companion called a cab; and from there on we rode slowly, through a heavy darkness which was blanketed by a wet, penetrating fog. The cabby, evidently one who knew my companion by sight (and what London cabby does not know his Scotland Yard men!) chose a route that twisted through gloomy, uninhabited side streets, seldom winding into the main routes of traffic.

As for Drake, he sank back in the uncomfortable seat and made no attempt at conversation. For the entire first part of our journey he said nothing. Not until we had reached a black, unlighted section of the city did he turn to me.

"Dale," he said at length, "have you ever hunted tiger?"

I looked at him and laughed.

"Why?" I replied. "Do you expect this hunt of ours will be something of a blind chase?"

"It will be a blind chase, no doubt of it," he said. "And when we have followed the trail to its end, I imagine we shall find something very like a tiger to deal with. I have looked rather deeply into Michael Strange's life, and unearthed a bit of the man's character. He has twice been accused of murder—murder by hypnotism—and has twice cleared himself by throwing scientific explanations at the police. That is the nature of his entire history for the past ten years."

I NODDED, without replying. As Drake turned away from me again, our cab poked its laboring nose into a narrowing, gloomy street. I had a glimpse of a single unsteady street lamp on the corner, and a dim sign, "Mate Lane." And then we were dragging along the curb. The cab stopped with a groan.

I had stepped down and was standing by the cab door when suddenly, from the darkness in front of me, a strange figure advanced to my side. He glanced at me intently; then, seeing that I was evidently not the man he sought, he turned to Drake. I heard a whispered greeting and an undertone of conversation. Then, quietly, Drake stepped toward me.

"Dale," he said, "I thought it best that I should not show myself here tonight. No, there is no time for explanation now; you will understand later. Perhaps"—significantly—"sooner than you anticipate. Inspector Hartnett will go through the rest of this pantomime with you."

I shook hands with Drakes' man, still rather bewildered at the sudden substitution. Then, before I was aware of it, Drake had vanished and the cab was gone. We were alone, Hartnett and I, in Mate Lane.

The home of Michael Strange—number seven—was hardly inviting. No light was in evidence. The big house stood like a huge, unadorned vault set back from the street, some distance from its adjoining buildings. The heavy steps echoed to our footbeats as we mounted them in the darkness; and the sound of the bell, as Hartnett pressed it came sharply to us from the silence of the interior.

WE stood there, waiting. In the short interval before the door opened, Hartnett glanced at his watch (it was nearly ten o'clock), and said to me:

"I imagine, Doctor, we shall meet a blank wall. Let me do the talking, please."

That was all. In another moment the big door was pulled slowly open from the inside, and in the entrance, glaring out at us, stood the man we had come to see. It is not hard to remember that first impression of Michael Strange. He was a huge man, gaunt and haggard, moulded with the hunched shoulders and heavy arms of a gorilla. His face seemed to be unconsciously twisted into a snarl. His greeting, which came only after he had

stared at us intently for nearly a minute, was curt and rasping.

"Well, gentlemen? What is it?"

"I should like a word with Dr. Michael Strange," said my companion quietly.

"I am Michael Strange."

"And I," replied Hartnett, with a suggestion of a smile, "am Raoul Hartnett, from Scotland Yard."

I did not see any sign of emotion on Strange's face. He stepped back in silence to allow us to enter. Then closing the the big door after us, he led the way along a carpeted hall to a small, ill-lighted room just beyond. Here he motioned us to be seated, he himself standing upright beside the table, facing us.

"From Scotland Yard," he said, and the tone was heavy with dull sarcasm. "I am at your service, Mr. Hartnett."

AND now, for the first time, I wondered just why Drake had insisted on my coming here to this gloomy house in Mate Lane. Why he had so deliberately arranged a substitute so that Michael Strange should not come face to face with him directly. Evidently Hartnett had been carefully instructed as to his course of action—but why this seemingly unnecessary caution on Drake's part? And now, after we had gained admission, what excuse would Hartnett offer for the intrusion? Surely he would not follow the bull-headed rôle of a common policeman!

There was no anger, no attempt at dramatics, in Hartnetts' voice. He looked quietly up at our host.

"Dr. Strange," he said at length, "I have come to you for your assistance. Last night, some time after midnight, Franklin White was strangled to death. He was murdered, according to substantial evidence, by the girl he was going to marry—Margot Vernee. I come to you because you know this girl rather well, and can perhaps help Scotland Yard in finding her motive for killing White."

Michael Strange said nothing. He stood there, scowling down at my companion in silence. And I, too, I must admit, turned upon Hartnett with a stare of bewilderment. His accusation of Margot had brought a sense of horror to me. I had expected almost anything from him, even to a mad accusation of Strange himself. But I had hardly foreseen this cold blooded declaration.

"You understand, Doctor," Hartnett went on, in that same ironical drawl, "that we do not believe Margot Vernee did this thing herself. She had a companion, undoubtedly, one who accompanied her to the house on After Street, and assisted her in the crime. Who that companion was, we are not sure; but there is decidedly a case of suspicion against a certain young London sportsman. This fellow is known to have prowled about the White mansion both on the night of the murder and the night before."

HARTNETT glanced up casually. Strange's face was a total mask. When he nodded, the nod was the most even and mechanical thing I have ever seen. Certainly this man could control his emotions!

"Naturally, Doctor," Hartnett said, "we have gone rather deeply into the past life of the lady in question. Your name appears, of course, in a rather unimportant interval when Margot Vernee resided in Paris. And so we come to you in the hope that you can perhaps give us some slight bit of information—something that seems insignificant, perhaps, to you, but which may put us on the right track."

It was a careful speech. Even as Hartnett spoke it, I could have sworn that the words were Drake's, and had been memorized. But Michael Strange merely stepped back to the table and faced us without a word. He was probably, during that brief interlude, attempting to realize his position, and to discover just how much Raoul Hartnett actually knew.

And then, after his interim of silence, he came forward sullenly and stood over my comrade.

"I will tell you this much, Mr. Hartnett, of Scotland Yard," he said bitterly: "My relations with Margot Vernee are not an open book to be passed through the clumsy fingers of ignorant police officers. As to this murder, I know nothing. At the time of it, I was seated in this room in company with a distinguished group of scientific friends. I will tell you, on authority, that Margot *did not murder her lover*. Why? Because she loved him!"

THE last words were heavy with bitterness. Before they had died into silence, Michael Strange had opened the door of his study.

"If you please, gentlemen," he said quietly.

Hartnett got to his feet. For an instant he stood facing the gorilla-like form of our host; then he stepped over the sill, without a word. We passed down the unlighted corridor in silence, while Strange stood in the door of his study, watching us. I could not help but feel, as we left that gloomy house, that Strange had suddenly focused his entire attention upon me, and had ignored my companion. I could feel those eyes upon me, and feel the force of the will behind them. A decided feeling of uneasiness crept over me, and I shuddered.

A moment later the big outer door had closed shut after us, and we were alone in Mate Lane. Alone, that is, until a third figure joined us in the shadows, and Drake's hand closed over my arm.

"Capital, Dale," he said triumphantly. "For half an hour you entertained him, you and Hartnett. And for half an hour I've had the unlimited freedom of his inner rooms, with the aid of an unlocked window on the lower floor. Those inner rooms, gentlemen, are significant—very!"

As we walked the length of Mate Lane, the gaunt, sinister home of Michael Strange became an indistinct outline in the pitch behind us. Drake said nothing more on the return trip, until we had nearly reached my rooms. Then he turned to me with a smile.

"We are one up on our friend, Dale," he said. "He does not know, just now, which is the bigger fool—you or Hartnett here. However, I imagine Hartnett will be the victim of some very unusual events before many hours have passed!"

That was all. At least, all of significance. I left the two Scotland Yard men at the opening of Cheney Lane, and continued alone to my rooms. I opened the door and let myself in quietly. And there some few hours later, began the last and most horrible phase of the case of the murder machine.

IT began—or to be more accurate, I began to react to it—at three o'clock in the morning. I was alone, and the rooms were dark. For hours I had sat quietly by the table, considering the significant events of the past few days. Sleep was impossible with so many unanswered questions staring into me, and so I sat there wondering.

Did Drake actually believe that Margot Vernee's simple story had been a ruse—that she had in truth killed her lover on that midnight intrusion of his home? Did he believe that Michael Strange knew of that intrusion—that he had possibly planned it himself, and aided her, in order that Margot might be free to return to him? Did Strange know of that other intrusion, and of the uncanny power which had driven Sir John Harmon, and supposedly driven Margot, to that house on After Street?

Those were the questions that still remained without answers; and it was over those questions that I pondered, while my surroundings became darker and more silent as the hour became more advanced. I heard the clock

strike three, and heard the answering drone of Big Ben from the square.

AND then it began. At first it was little more than a sense of nervousness. Before I had been content to sit in my chair and doze. Now, in spite of myself, I found myself pacing the floor, back and forth like a caged animal. I could have sworn, at the time, that some sinister presence had found entrance to my room. Yet the room was empty. And I could have sworn, too, that some silent power of will was commanding me, with undeniable force, to go out—out into the darkness of Cheney Lane.

I fought it bitterly. I laughed at it, yet even through my laugh came the memory of Sir John Harmon and Margot, and what they had told me. And then, unable to resist that unspoken demand, I seized my hat and coat and went out.

Cheney Lane was deserted, utterly still. At the end of it, the street lamp glowed dully, throwing a patch of ghastly light over the side of the adjoining building. I hurried through the shadows, and as I walked, a single idea had possession of me. I must hurry, I thought, with all possible speed, to that grim house in Mate Lane—number seven.

Where that deliberate desire came from I did not know. I did not stop to reason. Something had commanded me to go at once to Michael Strange's home. And though I stopped more than once, deliberately turning in my tracks, inevitably I was forced to retrace my steps and continue.

I REMEMBER passing through the square, and prowling through the unlightened side streets that lay beyond. Three miles separated Cheney Lane from Mate Lane, and I had been over the route only once before, in a cab. Yet I followed that route without a single false turn, followed it instinctively. At every intersecting street I was dragged in a certain direction, and not once was I allowed to hesitate. It was as though some unseen demon perched on my shoulders, as the demon of the sea rode Sinbad, and pointed out the way.

Only one disturbing thing occured on that night journey through London. I had turned into a narrow street hardly more than a quarter mile from my destination; and before me, in the shadows, I made out the form of a shuffling old man. And here, as I watched him, I was conscious of a new, mad desire. I crept upon him stealthily, without a sound. My hands were outstretched, clutching, for his throat. At that moment I should have killed him!

I cannot explain it. During that brief interval I was a murderer at heart. I wanted to kill. And now that I remember it, the desire had been pregnant in me ever since the lights of Cheney Lane had died behind me. All the time that I prowled through those black streets, murder lurked in my heart. I should have killed the first man who crossed my path.

But I did not kill him. Thank God, as my fingers twisted toward the back of his throat, that mad desire suddenly left me. I stood still, while the old fellow, still unsuspecting, shuffled away into the darkness. Then, dropping my hands with a sob of helplessness, I went forward again.

AND so I reached Mate Lane, and the huge gray house that awaited me. This time, as I mounted the stone steps, the old house seemed even more repulsive and horrible. I dreaded to see that door open, but I could not retreat.

I dropped the knocker heavily. A moment passed; and then, precisely as before, the huge door swung inward. Michael Strange stood before me.

He did not speak. Perhaps, if he had spoken, that fiendish spell would have been broken, and I should have returned, even then, to my own peaceful little rooms in Cheney Lane. No—

he merely held the door for me to enter, and as I passed him he stood there, watching me with a significant smile.

Straight to that familiar room at the end of the hall I went, with Strange behind me. When we had entered, he closed the door cautiously. For a moment he faced me without speaking.

"You came very close to committing a murder on your way here, did you not, Dale?"

I stared at him. How, in God's name, could this man read my thoughts so completely?

"You would have completed the murder," he said softly, "had I wished it. I did not wish it!"

I did not answer. There was no reply to such a mad declaration. As for my companion, he watched me for an instant and then laughed. He was not mad. I am doctor enough to know that.

But the laugh was not long in duration. He stepped forward suddenly and took my arm in a steel grip, dragging me toward the half hidden door at the farther end of the room.

"I shall not keep you long, Dale," he said harshly. "I could have killed you—could have made you kill yourself, and in fact, I intended to do so—but after all, you are merely a poor stumbling fool who has meddled in things too deep for you."

HE pulled open the door and pushed me forward. The room was dark, and not until he had closed the door again and switched on a dim light, could I see its contents.

Even then I saw nothing. At least, nothing of importance to an unscientific mind. There was a low table against the wall, with a profusion of tiny wires emanating from it. I was aware that a cup shaped microphone—or something very similar—hung over the table, about on a level with my eyes, had I been sitting in the chair. Beyond that I saw nothing, until Strange had moved forward and drawn aside a curtain that hung beside the table.

"I made you come here to-night, Dale," he murmured, "because I was a bit afraid of you. Your comrade, Hartnett, was an ignorant police officer. He has not the intellect to connect the series of events of the past day or two, and so I did not trouble myself with him. But you are an educated man. You have made no demonstrations of your ability in the field of science, but—"

He stopped speaking abruptly. From the room behind us came the sound of a warning bell. Strange turned quickly and went to the door.

"You will wait here, Doctor," he said. "I have another caller to-night. Another one who came the same way as you!"

He vanished. For a short interlude I was alone, with that peculiar radio-like apparatus before me. It was, for all the world, like a miniature control room in some small broadcasting station. Except for the odd shape of the microphone, if it was such I could detect no radical difference in equipment.

HOWEVER, I had little time for conjecture. A patter of footsteps interrupted me from the next room, and a frightened, feminine voice broke the stillness of the outer study. Even before the owner of that voice stepped in to my presence, I knew her.

And when she came, with white, fearful face and trembling body, I could not withhold a shudder of apprehension. It was the young woman who had come to my office—Margot Vernee. Evidently, at last, she had yielded to the horrible impulse that had drawn her back to Michael Strange, an impulse which, I now understood, had originated from the man himself.

He pressed her forward. There was nothing tender in his touch; it was cruel and triumphant.

"So you have succeeded—at last," I said bitterly.

He turned to me with a sneer.

"I have brought her here, yes," he re-

plied. "And now that she has come, she shall hear what I have to tell you. It will perhaps give her a respect for me, and this time she will not have the power to turn me away."

He pointed to the table, to the apparatus that lay there.

"I'm telling you this, Dale," he said, "because it gives me pleasure to do so. You are enough of a scientist to appreciate and understand it. And if, when I have finished, I have told you too much, there is a very easy way to keep your tongue silent. You have heard of hypnotism, Dale? You have heard also of radio? Have you ever thought of combining the two?"

HE faced me directly. I made no effort to reply.

"Radio," he said quietly, "is broadcast by means of sound waves. That much you know. But hypnotism too, can be transmitted through distance, if an instrument delicate enough to transmit *thought waves* can be invented. For twenty years I have worked on that instrument, and for twenty years I have studied hypnotism. You understand, of course, that this instrument is worthless unless it is operated by a master mind. Thought waves are useless; they will not control the actions of even a cat. But hypnotic waves or concentrated thought waves—will control the world."

There was no denying him. He faced me with the savage triumph of a wild beast. He was glorying in his power, and in my amazement.

"I wanted Franklin White to die!" he cried. "It was I who murdered him. Why? Because he was about to take the girl I desired. Is that not reason enough for murder? And so I killed him. It was not Margot Vernee who strangled her lover; it was a complete stranger, a London sportsman, who had no reason for committing the murder, *except that I wished him to!*

"He died on the night of December seventh, murdered by Sir John Harmon, the sportsman. Why? Because, of all London, Sir John would be the last man to be suspected. I have a keen appreciation for the irony of fate! White would have died the night before, Dale, except that I lacked the courage to kill him. His murderer was standing, under my power, outside his very house—and then I suddenly thought it best that I should have an alibi. Your Scotland Yard is clever, and it was best that I have protection. And so, on the following night, I sent Sir John to the house once again. This time, while I sat here and controlled the actions of my puppet, a group of men sat here with me. They believed that I was experimenting with a new type of radio receiver!"

MICHAEL STRANGE laughed, laughed harshly, in utter triumph, as a cat laughs at the antics of his mouse victims.

"When that murder was done," he said, "I sent Margot to the scene, so that she might see her lover strangled, dead. I repeat, Dale, that I enjoy the irony of fate, especially when I can control it. And as for you—I brought you here to-night merely so that you would realize the intensity of the powers that control you. When you leave here, you will be unharmed—but after the exhibition I shall give you, I am sure that you will make no further attempt to interfere with things out of your realm of understanding."

I heard a sob from Margot. She had retreated to the door, and clung there. For myself, I did not move. Strange's recital had revealed to me the horrible lust that gripped him, and now I watched him in fascination. He would not harm the girl; that much I was sure of. In his distorted fashion he loved her. In his crazed, murderous way he would attempt to win her love, even though she had once scorned him.

I SAW him step toward the table. Saw him drop heavily into the chair, and stare directly into that microphonic thing that hung before his

eyes. As he stared, he spoke to me.

"Science, in its intricate forms, is probably above the mind of a common medical man, Dale," he said. "It would be useless to explain to you how my thoughts—and my will—can be transmitted through space. Perhaps you have sat in a theater and stared at a certain person until that person turned to face you. You have? Then you will perhaps understand how I can control the minds of any human creature within the radius of my power. You see, Dale, this intricate little machine gives me the power to transform London into a city of stark murder. I could bring about such a horrible wave of crime that Scotland Yard would be scorned from one end of the world to the other. I could make every man murder his neighbor, until the streets of the city were running with blood!"

Strange turned quietly to look at me. He spoke deliberately.

"And now for the little exhibition of which I spoke, Dale," he murmured. "Your detective friend, Hartnett, has been under my power for the past three hours. You see, it was safer to control his movements, and be sure of him. And now, to be doubly sure of him, perhaps you would like to see him kill himself!"

I stepped forward with a sudden cry. Strange said nothing; his eyes merely burned into mine. Once again I felt that strange, all-powerful control forcing me back. I retreated, step by step, until the wall stopped me. Yet even as I retreated, a childish hope filled me. How could Strange, working his terrible murder machine, concentrate his power on any individual, when the whole of London lay before him?

HE answered my question. He must have read it as it came over me.

"Have you ever been in a crowd, Dale, and watched a certain individual intently, until that particular individual turned to look at you? The rest of the crowd pays no attention, of course, but that one man. And now we shall make that one man murder himself!"

Strange turned slowly. I saw his fingers creep along the rim of the table, touching certain wires that came together there. I heard a dull, droning hum fill the room, and, over it, Strange's penetrating voice.

"When I am finished, Dale, I shall probably kill you. I brought you here merely to frighten you, but I believe I have told you too much."

With that new horror upon me, I saw my captor's lips move slowly. . . .

And then, from the shadows at the other end of the small room, came a low, unemotional voice.

"Before you begin, Strange—"

Michael Strange whipped about in his chair like a tiger. His hand dropped to his pocket, so swiftly that my eyes did not follow it. And as it dropped, a single staccato shot split the darkness of the room. The scientist slumped forward in his chair.

The dull, whirring sound of that hellish machine had stopped abruptly, cut short by the sudden weight of Strange's lunging body as he fell upon it. I saw the livid, fiery snake of white light twist suddenly upward through that coil of wires; and in another moment the entire apparatus shattered by a blinding crash of flame.

AFTER that I turned away. Whether the bullet killed Strange or not, I do not know; but the sight of his charred face, hanging over that table of destruction, told its own story.

It was Inspector Drake who came across the room toward me, and took my arm. The smoking revolver still lay in his hand, and as he led me into the adjoining room, I saw that Margot had already found refuge there.

"You see now, Dale," Drake said quietly, "why I let Hartnett go with you before? If Strange had suspected me, I should have been merely another victim. As for Hartnett, he has been under constant guard down at headquarters. He's safe. They've kept him there, at my instructions, in spite of

all his terrific efforts to leave them."

I was listening to my companion in admiration. Even then I did not quite understand.

"I was wrong in just one thing, Dale. I left you alone, without protection. I believed Strange would ignore you, because, after all, you are not a Scotland Yard man. Thank God I had the sense to follow Margot—to trail her here—and get here soon enough."

AND so ended the horrible series of events that began with Sir John Harmon's chance visit to my study. As for Harmon, he was later cleared of all guilt, upon the charred evidence in Michael Strange's house in Mate Lane. The girl, I believe, has left London, where she can be as far as possible from memories that are all too terrible.

As for me, I am back once again in my quiet rooms in Cheney Lane, where the routine of common medical practice has wiped out many of those vivid horrors. In time, I believe, I shall forget, unless Inspector Drake, of Scotland Yard, insists upon bringing the affair up again!

IN THE NEXT ISSUE

THE INVISIBLE DEATH

A Thrilling Novelet of an Invisible Empire Within the United States

By Victor Rousseau

STOLEN BRAINS

Another Absorbing Dr. Bird Story

By Capt. S. P. Meek

PRISONERS ON THE ELECTRON

An Exciting Story of a Young Man Marooned on an Electron

By Robert H. Leitfred

JETTA OF THE LOWLANDS

Part Two of the Current Novel

By Ray Cummings

—AND OTHERS!

We had been captured by a race of gigantic beetles.

The Attack from Space

A SEQUEL TO "BEYOND THE HEAVISIDE LAYER"

By Captain S. P. Meek

"No one knows what unrevealed horrors space holds and the world will never rest entirely easy until the slow process of time again heals the protective layer."—From "Beyond the Heaviside Layer."

OVER a year has passed since I wrote those lines. When they were written the hole which Jim Carpenter had burned with his battery of infra-red lamps through the heaviside layer, that hollow sphere of invisible semi-plastic organic matter which encloses the world as a nutshell does a kernel, was gradually filling in as he had predicted it would: every one thought that in another ten years the world would be safely enclosed again in its protective layer as it had been since the dawn of time. There were some adventurous spirits who deplored this fact, as it would effectually bar interplanetary travel, for Hadley had proved with his life that no space flyer could force its way through the fifty miles of almost solid material which barred the road to space,

From a far world came monstrous invaders who were all the more terrifying because invisible.

but they were in the minority. Most of humanity felt that it would rather be protected against the denizens of space than to have a road open for them to travel to the moon if they felt inclined.

To be sure, during the five years that the hole had been open, nothing more dangerous to the peace and well-being of the world had appeared from space than a few hundreds of the purple amoeba which we had found so numerous on the outer side of the layer, when we had traveled in a Hadley space ship up through the hole into the outer realms of space, and one lone specimen of the green dragons which we had also encountered. The amoeba had been readily destroyed by the disintegrating rays of the guarding space-ships which were stationed inside the layer at the edge of the hole and the lone dragon had fallen a ready victim to the machine-gun bullets which had been poured into it. At first the press had damned Jim Carpenter for opening the road for these horrors, but once their harmlessness had been clearly established, the row had died down and the appearance of an amoeba did not merit over a squib on the inside pages of the daily papers.

WHILE the hole in the heaviside layer was no longer news for the daily press, a bitter controversy still waged in the scientific journals as to the reason why no observer on earth, even when using the most powerful telescopes, could see the amoeba before they entered the hole, and then only when their telescopes were set up directly under the hole. When a telescope of even small power was mounted in the grounds back of Carpenter's laboratory, the amoeba could be detected as soon as they entered the hole, or when they passed above it through space; but, aside from that point of vantage, they were entirely invisible.

Carpenter's theory of the absorptive powers of the material of which the heaviside layer was composed was laughed to scorn by most scientists, who pointed out the fact that the sun, moon and stars could be readily seen through it. Carpenter replied that the rays of colored or visible light could only pass through the layer when superimposed upon a carrier wave of ultra-violet or invisible light. He stated dogmatically that the amoeba and the other denizens of space absorbed all the ultra-violet light which fell on them and reflected only the visible rays which could not pass through the heaviside layer because of the lack of a synchronized carrier wave of shorter wave-length.

DESPETIER replied at great length and showed by apparently unimpeachable mathematics that Carpenter was entirely wrong and that his statements showed an absolute lack of knowledge of the most elementary and fundamental laws of light transmission. Carpenter replied briefly that he could prove by mathematics that two was equal to one and he challenged Despetier or anyone else to satisfactorily explain the observed facts in any other way. While they vainly tried to do so, Carpenter lapsed into silence in his Los Angeles laboratory and delved ever deeper into the problems of science. Such was the situation when the attack came from space.

My first knowledge of the attack came when McQuarrie, the city editor of the San Francisco *Clarion*, sent for me. When I entered his office he tossed a Los Angeles dispatch on the desk before me and with a growl ordered me to read it. It told of the unexplained disappearance of an eleven year old boy the night before. It looked like a common kidnaping.

"Well?" I asked as I handed him back the dispatch.

WITH another growl he tossed down a second telegram. I read it with astonishment, for it told of a second disappearance which had happened about an hour after the first.

The similarity of the two cases was at once apparent.

"Coincidence or connection?" I asked as I returned it.

"Find out!" he replied. "If I knew which it was I wouldn't be wasting the paper's money by sending you to Los Angeles. I don't doubt that I am wasting it anyway, but as long as I am forced to keep you on as a reporter, I might as well try to make you earn the money the owner wastes on paying you a salary, even although I know it to be a hopeless task. Go on down there and see what you can find out, if anything."

I jotted down in my notebook the names and addresses of the missing children and turned to leave. A boy entered and handed McQuarrie a yellow slip. He glanced at it and called me back.

"Wait a minute, Bond," he said as he handed me the dispatch. "I doubt but you'd better fly down to Los Angeles. Another case has just been reported."

I hastily copied down the dispatch he handed me, which was almost a duplicate of the first two with the exception of the time and the name. Three unexplained disappearances in one day was enough to warrant speed; I drew some expense money and was on my way south in a chartered plane within an hour.

ON my arrival I went to the Associated Press office and found a message waiting for me, directing me to call McQuarrie on the telephone at once.

"Hello, Bond," came his voice over the wire, "have you just arrived? Well, forget all about that disappearance case. Prince is on his way to Los Angeles to cover it. You hadn't been gone an hour before a wire came in from Jim Carpenter. He says, 'Send Bond to me at once by fastest conveyance. Chance for a scoop on the biggest story of the century.' I don't know what it's about, but Jim Carpenter is always front page news. Get in touch with him at once and stay with him until you have the story. Don't risk trying to telegraph it when you get it—telephone. Get moving!"

I lost no time in getting Carpenter on the wire.

"Hello, First Mortgage," he greeted me. "You made good time getting down here. Where are you?"

"At the A. P. Office."

"Grab a taxi and come out to the laboratory. Bring your grip with you: you may have to stay over night."

"I'll be right out, Jim. What's the story?"

His voice suddenly grew grave.

"It's the biggest thing you ever handled," he replied. "The fate of the whole world may hang on it. I don't want to talk over the phone; come on out and I'll give you the whole thing."

AN hour later I shook hands with Tim, the guard at the gate of the Carpenter laboratory, and passed through the grounds to enter Jim's private office. He greeted me warmly and for a few minutes we chatted of old times when I worked with him as an assistant in his atomic disintegration laboratory and of the stirring events we had passed through together when we had ventured outside the heaviside layer in his space ship.

"Those were stirring times," he said, "but I have an idea, First Mortgage, that they were merely a Sunday school picnic compared to what we are about to tackle."

"I guessed that you had something pretty big up your sleeve from your message," I replied. "What's up now? Are we going to make a trip to the moon and interview the inhabitants?"

"We may interview them without going that far," he said. "Have you seen a morning paper?"

"No."

"Look at this."

HE handed me a copy of the *Gazette*. Streamer headlines told of the three disappearances which I had come to Los Angeles to cover, but

they had grown to five during the time I had been flying down. I looked at Jim in surprise.

"We got word of that in San Francisco," I told him, "and I came down here to cover the story. When I got here, McQuarrie telephoned me your message and told me to come and see you instead. Has your message anything to do with this?"

"It has everything to do with it, First Mortgage; in fact, it *is* it. Have you any preconceived ideas on the disappearance epidemic?"

"None at all."

"All the better—you'll be able to approach the matter with an unbiased viewpoint. Don't read that hooey put out by an inspired reporter who blames the laxness of the city government; I'll give you the facts without embellishment. Nothing beyond the bare fact of the disappearance is known about the first case. Robert Prosser, aged eleven, was sent to the grocery store by his mother about six-thirty last night and failed to return. That's all we know about it, except that it happened in Eagle Rock. The second case we have a little more data on. William Hill, aged twelve, was playing in Glendale last night with some companions. They were playing 'hide and go seek' and William hid. He could not be found by the boy who was searching and has not been found since. His companions became frightened and reported it about eight o'clock. They saw nothing, but mark this! Four of them agree that they heard a sound in the air *like a motor humming*."

"That proves nothing."

"TAKEN alone it does not, but in view of the third case, it is quite significant. The third case happened about nine-thirty last night. This time the victim was a girl, aged ten. She was returning home from a moving picture with some companions and she disappeared. This time the other children saw her go. They say she was suddenly taken straight up into the air and then disappeared from sight. They also claim to have heard a sound like a big electric fan in the air at the time, although they could see nothing."

"Had they heard the details of the second disappearance?"

"They had not. I can see what you are thinking; that they were unconsciously influenced by the account given of the other case."

"Consciously or unconsciously."

"I doubt it, for the fourth case was almost a duplicate of the third. The fourth and fifth cases happened this morning. In the fourth case the child, for it was a nine year old girl this time, was lifted into the air in broad daylight and disappeared. This disappearance was witnessed, not only by children, but also by two adults, and their testimony agrees completely with that of the children. The fifth case is similar to the first: a ten year old boy disappeared without trace. The whole city is in a reign of terror."

THE telephone at Carpenter's elbow rang and he answered it. A short conversation took place and he turned to me with a grim face as he hung up the receiver.

"Another case has just been reported to police headquarters from Beverly Hills," he said. "Again the child was seen to be lifted into the air by some invisible means and disappeared. The sound of a motor was plainly heard by five witnesses, who all agree that it was just above their heads, but that nothing could be seen."

"Was it in broad daylight?"

"Less than an hour ago."

"But, Jim, that's impossible!"

"Why is it impossible?"

"It would imply the invisibility of a tangible substance; of a solid."

"What of it?"

"Why, there isn't any such substance. Nothing of the sort exists."

Carpenter pointed to one of the windows of his laboratory.

"Does that window frame contain glass or not?" he asked.

I strained my eyes. Certainly nothing was visible.

"Yes," I said at a venture.

HE rose and thrust his hand through the space where the glass should have been.

"Has this frame glass in it?" he asked, pointing to another.

"No."

He struck the glass with his knuckle.

"I'll give up," I replied. "I am used to thinking of glass as being transparent but not invisible; yet I can see that under certain light conditions it may be invisible. Granted that such is the case, do you believe that living organisms can be invisible?"

"Under the right conditions, yes. Has any observer been able to see any of the purple amoeba which we know are so numerous on the outer side of the heaviside layer?"

"Not until they have entered the hole through the layer."

"And yet those amoeba are both solid and opaque, as you know. Why is it not possible that men, or intelligences of some sort, are in the air about us and yet are invisible to our eyes?"

"If they are, why haven't we received evidence of it years ago?"

"Because there has only been a hole through the heaviside layer for six years. Before that time they could not penetrate it any more than poor Hadley could with his space ship. They have not entered the hole earlier because it is a very small one, at present only some two hundred and fifty yards in diameter in a sphere of over eight thousand miles diameter. The invaders have just found the entrance."

"The invaders? Do you think that the world has been invaded?"

"I DO. How else can you explain the very fact which you have just quoted, that no evidence of the presence on these invisible entities has previously been recorded?"

"Where did they come from?"

"They may have come from anywhere in the solar system, or even from outside it, but I fancy that they are from Mars or Venus."

"Why so?"

"Because they are the two planets nearest to the earth and are the ones where conditions are the most like they are on the earth. Venus, for example, has an atmosphere and a gravity about .88 of earthly gravity, and life of a sort similar to that of the earth might well live there. Further, it seems more probable that the invaders have come from one of the nearby planets than from the realms of space beyond the solar system."

"What about the moon?"

"We can dismiss that because of the lack of an atmosphere."

"It sounds logical, Jim, but the idea of living organisms of sufficient size to lift a child into the air who are invisible seems a little absurd."

"I never said they were invisible. I don't think they are."

"But they must be, else why weren't they seen?"

"Use your head, First Mortgage. Those purple amoeba we encountered were quite visible to us, yet they are invisible to observers on the earth."

"Yes, but that is because the heaviside layer is between them and the earth. As soon as they come below it they can be seen."

"EXACTLY. Why is it not possible that the Venetians, or Martians, or whoever our invaders are, have encased themselves and their space flyer in a layer of some substance similar to the heaviside layer, a substance which is permeable to light rays only when a large proportion of ultra-violet rays accompany the visible rays? If they did this and then constructed the walls of their ship of some substance which absorbed all the ultra-violet rays which fell on it; not only would the ship itself be invisible, but also everything contained in it—and yet they could see the outside world easily. That such *is* the case is proved by the

disappearance of those children in mid-air. They were taken into a space ship behind an ultra-violet absorbing wall and so became invisible."

"If the walls absorbed all the ultra-violet and were impermeable to light without ultra-violet, the ship would appear as a black opaque substance and could be seen."

"That would be true except for one thing, which you are forgetting. The heaviside layer, as I have repeatedly proved, is a splendid conductor of ultra-violet. The rays falling on it are probably bent along the line of the covering layer so that they open up and bend around the ship in the same manner as flowing water will open up and flow around a stone and then come together again. The light must flow around the solid ship and then join again in such a manner that the eye can detect no interruption."

"Jim, all that sounds reasonable, but have you any proof of it?"

"No, First Mortgage, I haven't—yet; but if the Lord is good to us we'll have definite proof this afternoon and be in a position to successfully combat this new menace to the world."

"Do you expect me to go on another one of your crack-brained expeditions into the unknown with you?"

"CERTAINLY I do, but this time we won't go out of the known. I have our old space flyer which we took beyond the heaviside layer six years ago ready for action and we're going to look for the invaders this afternoon."

"How will we see them if they are invisible?"

"They are invisible to ordinary light but not to ultra-violet light. While most of the ultra-violet is deflected and flows around the ship or else is absorbed, I have an idea that, if we bathe it in a sufficient concentration of ultra-violet, some would be reflected. We are going to look for the reflected portion."

"Ultra-violet light is invisible."

"It is to the eye, but it can be detected. You know that radium is activated and glows under ultra-violet?"

"Yes."

"Mounted on our flyer are six ultra-violet searchlights. By the side of each one is a wide angle telescopic concentrator which will focus any reflected ultra-violet onto a radium coated screen and thus make it visible to us. In effect the apparatus is a camera obscura with all lens made of rock crystal or fused quartz, both of which allow free passage to ultra-violet."

"What will we do if we find them?"

"Mounted beneath the telescope is a one-pounder gun with radite shells. If we locate them, we will use our best efforts to shoot them down."

"Suppose they are armed too?"

"IN that case I hope that you shoot faster and straighter than they do. If you don't—well, old man, it'll just be too damned bad."

"I don't know that the *Clarion* hires me to go out and shoot at invisible invaders from another planet, but if I don't go with you, I expect you'd just about call up the *Echo* or the *Gazette* and ask them for a gunner."

"Just about."

"In that case, I may as well be sacrificed as anyone else. When do we start?"

"You old faker!" cried Jim, pounding me on the back. "You wouldn't miss the trip for anything. If you're ready we'll start right now. Everything is ready."

"Including the sacrifice," I replied, rising. "All right, Jim, let's go and get it over with. If we live, I'll have to get back in time to telephone the story to McQuarrie for the first edition."

I followed Jim out of the laboratory and to a large open space behind the main building where the infra-red generators with which he had pierced the hole through the heaviside layer had been located. The reflectors were still in place, but the bank of generators had been removed. A gang of men

were hard at work erecting a huge parabolic reflector in the center of the circle, about the periphery of which the infra-red reflectors were placed. In an open space near the center stood a Hadley space ship, toward which Jim led the way.

I WONDERED at the activity and meant to ask what it portended, but in the excitement of boarding the flyer forgot it. I followed Jim in; he closed the door and started the air-conditioner.

"Here, First Mortgage," he said as he turned from the control board and faced me, "here are the fluoroscopic screens. They are arranged in a bank, so that you can keep an eye on all of them readily. Beneath each telescope is an automatic one-pounder gun with its mount geared to the telescope and the light, so that the gun bears continually on the point in space represented by the center of the fluoroscopic screen which belongs to that light. If we locate anything, turn your beam until the object is in the exact center of the screen where these two cross-hairs are. When you have it lined up, push this button and the gun will fire."

"What about reloading?"

"The guns are self-loading. Each one has twenty shells in its magazine and will fire one shot each time the button is pushed until it is empty. If you empty one magazine, I can turn the ship so that another gun will bear. This gives you a total of one hundred and twenty shots quickly available; there are sixty extra pounds, which we can break out and load into the magazines in a few seconds. Do you understand everything?"

"I guess so. Everything seems clear enough."

"All right; sit down and we'll start."

I TOOK my seat, and Jim pulled the starting lever. I was glued to the seat and the heavy springs in the cushion were compressed almost to their limit by the sudden acceleration. As soon as we were well clear of the ground Jim reduced his power, and in a few moments we were floating motionless in the air, a thousand feet up. He left the control board and came to my side.

"Start your ultra lights," he said as he joined me. "We may be able to spot something from here."

I started the lights and we stared at the screens before us. Nothing appeared on any of them except the one pointing directly down, and only an image of the ground, appeared on it. Under Jim's tutelage I swung the beams in wide circles, covering the space around us, but nothing appeared.

"Those beams won't project over five miles in this atmosphere," he said, "and the ship we are looking for may be so small that we would have trouble locating it at any great distance. I am going to move over near the scene of the last disappearance. Keep your lights swinging and sing out if you see anything on the screens."

I could feel the ship start to move slowly under the force of a side discharge from the rocket motor, and I swung the beams of the six lights around, trying to cover the entire area about us. Nothing appeared on the screens for an hour, and my head began to ache from the strain of unremitting close observation of the glowing screens. A buzz sounding over the hum of the rocket motor attracted my attention; Jim pulled his levers to neutral with the exception of the one which maintained our elevation and stepped to an instrument on the wall of the flyer.

"Hello," he called. "What? Where did it happen? All right, thanks, we'll move over that way at once."

HE turned from the radio telephone and spoke.

"Another disappearance has just been reported," he said. "It happened on the outskirts of Pasadena. Keep your eyes open; I'm going to head in that direction."

A few minutes later we were floating over Pasadena. Jim stopped the flyer and joined me at the screens. We swung our beams in wide circles to cover the entire area around us, but no image on the screens rewarded us.

"Doggone it, they must have left here in a hurry," grumbled Jim.

Even as he spoke the flyer gave a lurch which nearly threw me off my seat and which sent Jim sprawling on the floor. With a white face he leaped to the control board and pulled the lever controlling our one working stern motor to full power. For a moment the ship moved upward and then came to a dead stop, although the motor still roared at full speed.

"Can't you see anything, Pete?" cried Jim as he threw our second stern motor into gear.

Again the ship moved upward for a few feet and then stopped. I swung the searchlights frantically in all directions, but five of the screens remained blank and the sixth showed only the ground below us.

"Not a thing," I replied.

"Something ought to show," he muttered, and suddenly shut off both motors. The flyer gave a sickening lurch toward the ground, but we fell only a hundred yards before our motion stopped. We hung suspended in the air with no motors working. Jim joined me at the screens and we swung the lights rapidly without success.

"Look, Pete!" Jim cried hoarsely.

MY gaze followed his pointing finger and I saw the door of our flyer springing out as though some force from the outside were trying to wrench it open. The pull ceased for an instant, then came again; the sturdy latches burst and the door was torn from its hinges. Jim swung one of the searchlights until the beam was at right angles to the hull of the flyer and pressed the gun button. A crash filled the confined space of the flyer as a one-pounder radite shell tore out into space.

"They're there but still invisible," he exclaimed as he shifted the direction of the gun and fired again. "I am shooting by guess-work, but I might score a hit."

He changed the direction of the gun again, but before he could press the button he was lifted into the air and drawn rapidly toward the open door.

"Shoot, Pete!" he shouted. "Shoot and keep on shooting—it's your only chance!"

I turned to the knobs controlling the guns and lights, but, before I could make a move, something hard and cold grasped me about the middle and I was lifted into the air and drawn toward the open door after Jim. I tore at the thing holding me with my hands, but it was a smooth round thing like a two-inch thick wire, and I could get no grip on it to loosen it. Out through the door I went and was drawn through the air a few feet behind Jim. He moved ahead of me for fifteen or twenty feet and then vanished in mid-air. I dared not struggle in mid-air and I was drawn through a door into a large space flyer which became visible as I entered it. The flexible wire or rod which had held me uncoiled and I was free on the floor beside Jim Carpenter. This much was clear and understandable, but when I looked at the crew of that space ship, I was sure that I had lost my mind or was seeing visions. I had naturally expected men, or at least something in semi-human form, but instead of anything of the sort, before me stood a dozen gigantic beetles!

I RUBBED my eyes and looked again. There was no mistaking the fact that we had been captured by a race of gigantic beetles flying an invisible space ship. When I had time later to examine them critically, I could see marked differences between our captors and the beetles we were accustomed to see on the earth besides the mere matter of size. To begin with, their bodies were relatively much

smaller, the length of shell of the largest specimen not being over four feet, while the head of the same insect, exclusive of the horns or pinchers, was a good eighteen inches in length. The pinchers, which by all beetle proportions should have been a couple of feet long at the least, did not extend over the head a distance greater than eight inches, although they were sturdy and powerful.

Instead of traveling with their shells horizontal as do earthly beetles, these insects stood erect on their two lower pairs of legs, which were of different lengths so that all four feet touched the ground when the shell was vertical. The two upper pairs of legs were used as arms, the topmost pair* being quite short and splitting out at the end into four flexible claws about five inches long, which they used as fingers. These upper arms, which sprouted from a point near the top of the head, were peculiar in that they apparently had no joints like the other three pairs but were flexible like an elephant's trunk. The second pair of arms were armed with long, vicious-looking hooks. The backplates concealed only very rudimentary wings, not large enough to enable the insects to fly, although Jim told me later that they could fly on their own planet, where the lessened gravity made such extensive wing supports as would be needed on earth unnecessary.

The backplates were a brilliant green in color, with six-inch stripes of chrome yellow running lengthwise and crimson spots three inches in diameter arranged in rows between the stripes. Their huge-faceted eyes sparkled like crystal when the light fell on them, and from time to time waves of various colors passed over them, evidently reflecting the insect's emotions. Although they gave the impression of great muscular power, their movements were slow and sluggish, and they seemed to have difficulty in getting around.

AS my horrified gaze took in these monstrosities I turned with a shudder to Jim Carpenter.

"Am I crazy, Jim," I asked, "or do you see these things too?"

"I see them all right, Pete," he replied. "It isn't as surprising as it seems at first glance. You expected to find human beings; so did I, but what reason had we for doing so? It is highly improbable, when you come to consider the matter, that evolution should take the same course elsewhere as it did on earth. Why not beetles, or fish, or horned toads, for that matter?"

"No reason, I guess," I answered; "I just hadn't expected anything of the sort. What do you suppose they mean to do with us?"

"I haven't any idea, old man. We'll just have to wait and see. I'll try to talk to them, although I don't expect much luck at it."

He turned to the nearest beetle and slowly and clearly spoke a few words. The insect gave no signs of comprehension, although it watched the movement of Jim's lips carefully. It is my opinion, and Jim agrees with me, that the insects were both deaf and dumb, for during the entire time we were associated with them, we never heard them give forth a sound under any circumstances, nor saw them react to any sound that we made. Either they had some telepathic means of communication or else they made and heard sounds beyond the range of the human ear, for it was evident from their actions that they frequently communicated with one another.

WHEN Jim failed in his first attempt to communicate he looked around for another method. He no-

*Mr. Bond has made a laughable error in his description. Like all of the coleoptera, the Mercurians were hexapoda (six-legged). What Mr. Bond continually refers to in his narrative as "upper arms" were really the antenna of the insects which split at the end into four flexible appendages resembling fingers. His mistake is a natural one, for the Mercurians used their antenna as extra arms. —James S. Carpenter.

ticed my notebook, which had fallen on the floor when I was set down; he picked it up and drew a pencil from his pocket. The insects watched his movements carefully, and when he had made a sketch in the book, the nearest one took it from him and examined it carefully and then passed it to another one, who also examined it. The sketch which Jim had drawn showed the outline of the Hadley space flyer from which he had been taken. When the beetles had examined the sketch, one of them stepped to an instrument board in the center of the ship and made an adjustment. Then he pointed with one of his lower arms.

We looked in the direction in which he pointed; to our astonishment, the walls of the flyer seemed to dissolve, or at least to become perfectly transparent. The floor of the space ship was composed of some silvery metal, and from it had risen walls of the same material, but now the effect was as though we were suspended in mid-air, with nothing either around us or under us. I gasped and grabbed at the instrument board for support. Then I felt foolish as I realized that there was no change in the feel of the floor for all its transparency and that we were not falling.

A SHORT distance away we could see our flyer suspended in the air, held up by two long flexible rods or wires similar to those which had lifted us from our ship into our prison. I saw a dozen more of these rods coiled up, hanging in the air, evidently, but really on the floor near the edge of the flyer, ready for use. Jim suddenly grasped me by the arm.

"Look behind you in a moment," he said, "but don't start!"

He took the notebook in his hand and started to draw a sketch. I looked behind as he had told me to. Hanging in the air in a position which told me that they must have been in a different compartment of the flyer, were five children. They were white as marble, and lay perfectly motionless.

"Are they dead, Jim?" I asked in a low voice without looking at him.

"I don't know," he replied, "but we'll find out a little later. I am relieved to find them here, and I doubt if they are harmed."

The sketch which he was making was one of the solar system, and, when he had finished, he marked the earth with a cross and handed the notebook to one of the beetles. The insect took it and showed it to his companions; so far as I was able to judge expressions, they were amazed to find that we had knowledge of the heavenly bodies. The beetle took Jim's pencil in one of its hands and, after examining it carefully, made a cross on the circle which Jim had drawn to represent the planet Mercury.

"THEY come from Mercury," exclaimed Jim in surprise as he showed me the sketch. "That accounts for a good many things; why they are so lethargic, for one thing. Mercury is much smaller than the earth and the gravity is much less. According to Mercurian standards, they must weigh a ton each. It is quite a tribute to their muscular development that they can move and support their weight against our gravity. They can understand a drawing all right, so we have a means of communicating with them, although a pretty slow one and dependent entirely on my limited skill as a cartoonist. I wonder if we are free to move about?"

"The only way to find out is to try," I replied and stood erect. The beetles offered no objection and Jim stood up beside me. We walked, or rather edged, our way toward the side of the ship. The insects watched us when we started to move and then evidently decided that we were harmless. They turned from us to the working of the ship. One of them manipulated some dials on the instrument board. One of the rods which held our flyer released its grip, came in toward the Mercurian ship and coiled itself up on the floor,

or the place where the floor should have been. The insect touched another dial. Jim threw caution to the winds, raced across the floor and grasped the beetle by the arm.

The insect looked at him questioningly; Jim produced the notebook and drew a sketch representing our flyer falling. On the level he had used to represent the ground he made another sketch of it lying in ruins. The beetle nodded comprehendingly and turned to another dial; the ship sank slowly toward the ground.

WE sank until we hung only a few feet from the ground when our flyer was gently lowered down. When it rested on the ground, the wire which had held it uncoiled, came aboard and coiled itself up beside the others. As the Mercurian ship rose I noticed idly that the door which had been torn from our ship and dropped lay within a few yards of the ship itself. The Mercurian ship rose to an elevation of a hundred feet, drifting gently over the city.

As we rose I determined to try the effect of my personality on the beetles. I approached the one who seemed to be the leader and, putting on the most woeful expression I could muster, I looked at the floor. He did not understand me and I pretended that I was falling and grasped at him. This time he nodded and stepped to the instrument board. In a moment the floor became visible. I thanked him as best I could in pantomine and approached the walls. They were so transparent that I felt an involuntary shrinking as I approached them. I edged my way cautiously forward until my outstretched hand encountered a solid substance. I looked out.

At the slow speed we were traveling the drone of our motors was hardly audible to us, and I felt sure that it could not be heard on the ground. Once their curiosity was satisfied, our captors paid little or no attention to me and left me free to come and go as I wished. I made my way cautiously toward the children, but ran into a solid wall. Remembering Jim's words, I made my way back toward him without displaying any interest.

JIM could probably have wandered around as I did had he wished, but he chose to occupy his time differently. With his notebook and pencil he carried on an extensive conversation, if that term can be applied to a crudely executed set of drawing, with the leader of the beetles. I was not especially familiar with the methods of control of space ships and I could make nothing of the maze of dials and switches on the instrument board.

For half an hour we drifted slowly along. Presently one of the beetles approached, seized my arm and turned me about. With one of his arms he pointed ahead. A mile away I could see another space flyer similar to the one we were on.

"Here comes another one, Jim," I called.

"Yes, I saw it some time ago. I don't know where the third one is."

"Are there three of them?"

"Yes. Three of them came here yesterday and are exploring the country round about here. They are scouts sent out from the fleet of our brother planet to see if the road was clear and what the world was like. They spotted the hole through the layer with their telescope and sent their fleet out to pay us a visit. He tells me that the scouts have reported favorably and that the whole fleet, several thousand ships, as near as I can make out, are expected here this evening."

"Have you solved the secret of their invisibility?"

"PARTLY. It is as I expected. The walls of the ship are double, the inner one of metal and the outer one of vitrolene or some similar perfectly transparent substance. The space between the walls is filled with some substance which will bend both

visible and ultra-violet rays along a path around the ship and then lets them go in their original direction. The reason why we can see through the walls and see the protective coating of that ship coming is that they are generating some sort of a ray here which acts as a carrier for the visible light rays. I don't know what sort of a ray it is, but when I get a good look at their generators, I may be able to tell. Are you beginning to itch and burn?"

"Yes, I believe that I am, although I hadn't noticed it until you spoke."

"I have been noticing it for some time. From its effects on the skin, I am inclined to believe it to be a ray of very short wave-length, possibly something like our X-ray, or even shorter."

"Have you found out what they intend to do with us?"

"I don't think they have decided yet. Possibly they are going to take us up to the leader of their fleet and let him decide. The cuss that is in command of this ship seems surprised to death to find out that I can comprehend the principles of his ship. He seems to think that I am a sort of a rara avis, a freak of nature. He intimated that he would recommend that we be used for vivisection."

"Good Lord!"

"It's not much more worse than the fate they design for the rest of their captives, at that."

"What is that?"

"It's a long story that I'll have to tell you later. I want to watch this meeting."

THE other ship had approached to within a few yards and floated stationary, while some sort of communication was exchanged between the two. I could not fathom the method used, but the commander of our craft clamped what looked like a pair of headphones against his body and plugged the end of a wire leading from them into his instrument board. From time to time various colored lights glowed on the board before him. After a time he uncoupled his device from the board, and one of the long rods shot out from our ship to the other. It returned in a moment clamped around the body of a young girl. As she came on board, she was lowered onto the deck beside the other children. Like them, she was stiff and motionless. I gave an exclamation and sprang forward.

"Pete!"

Jim's voice recalled me to myself, and I watched the child laid with the others with as disinterested an expression as I could muster. I had never made a mistake in following Jim Carpenter's lead and I knew that somewhere in his head a plan was maturing which might offer us some chance of escape.

Our ship moved ahead down a long slant, gradually dropping nearer to the ground. I watched the maneuver with interest while Jim, with his friend the beetle commander, went over the ship. The insect was evidently amused at Jim and was determined to find out the limits of his intelligence, for he pointed out various controls and motors of the ship and made elaborate sketches which Jim seemed to comprehend fairly well.

ONE of the beetles approached the control board and motioned me back. I stepped away from the board; evidently a port in the side of the vessel opened, for I felt a breath of air and could hear the hum of the city. I walked to the side and glanced down, and found that we were floating about twenty feet off the ground over a street on the edge of the city. On the street a short distance ahead of us two children, evidently returning from school, to judge by the books under their arms, were walking unsuspectingly along. A turn of the dial sped up our motors, and as the hum rang out in a louder key the children looked upward. Two of the long flexible wires shot out and wrapped themselves about the chil-

dren; screaming, they were lifted into the space flyer. The port through which they came in shut with a clang and the ship rose rapidly into the air. The children were released from the wires which coiled themselves up on deck and the beetle who had operated them stepped forward and grasped the nearer of the children, a boy of about eleven, by the arm. He raised the boy, who was paralyzed with terror, up toward his head and gazed steadily into his eyes. Slowly the boy ceased struggling and became white and rigid. The beetle laid him on the deck and turned the girl. Involuntarily I gave a shout and sprang forward, but Jim grasped me by the arm.

"Keep quiet, you darned fool!" he cried. "We can do nothing now. Wait for a chance!"

"We can't stand here and see murder done!" I protested.

"It's not murder. Pete, those children aren't being hurt. They are being hypnotized so that they can be transported to Mercury."

"Why are they taking them to Mercury?" I demanded.

"As nearly as I can make out, there is a race of men up there who are subject to these beetles. This ship is radium propelled, and the men and women are the slaves who work in the radium mines. Of course the workers soon become sexless, but others are kept for breeding purposes to keep the race alive. Through generations of inbreeding, the stock is about played out and are getting too weak to be of much value.

"The Mercurians have been studying the whole universe to find a race which will serve their purpose and they have chosen us to be the victims. When their fleet gets here, they plan to capture thousands of selected children and carry them to Mercury in order to infuse their blood into the decadent race of slaves they have. Those who are not suitable for breeding when they grow up will die as slaves in the radium mines."

"HORRIBLE!" I gasped. "Why are they taking children, Jim? Wouldn't adults suit their purpose better?"

"They are afraid to take adults. On Mercury an earthman would have muscles of unheard of power and adults would constantly strive to rise against their masters. By getting children, they hope to raise them to know nothing else than a life of slavery and get the advantage of their strength without risk. It is a clever scheme."

"And are we to stand here and let them do it?"

"Not on your life, but we had better hold easy for a while. If I can get a few minutes more with that brute I'll know enough about running this ship that we can afford to do away with them. You have a pistol, haven't you?"

"No."

"The devil! I thought you had. I have an automatic, but it only carries eight shells. There are eleven of these insects and unless we can get the jump on them, they'll do us. I saw what looks like a knife lying near the instrument board; get over near it and get ready to grab it as soon as you hear my pistol. These things are deaf and if I work it right I may be able to do several of them in before they know what's happening. When you attack, don't try to ram them in the back: their backplates are an inch thick and will be proof against a knife thrust. Aim at their eyes; if you can blind them, they'll be helpless. Do you understand?"

"I'll do my best, Jim," I replied. "Since you have told me their plans I am itching to get at them."

I EDGED over toward the knife, but as I did so I saw a better weapon. On the floor lay a bar of silvery metal about thirty inches long and an inch in diameter. I picked it up and toyed with it idly, meanwhile edging around to get behind the insect which I had marked for my first attentions. Jim

was talking again by means of the notebook with his beetle friend. They walked around the ship, examining everything in it.

"Are you ready, Pete?" came Jim's voice at last.

"All set," I replied, getting a firmer grasp on my bar and edging toward one of the insects.

"Well, don't start until I fire. You notice the bug I am talking to? Don't kill him unless you have to. This ship is a little too complicated for me to fathom, so I want this fellow taken prisoner. We'll use him as our engineer when we take control."

"I understand."

"All right, get ready."

I kept my eye on Jim. He had drawn the beetle with whom he was talking to a position where they were behind the rest. Jim pointed at something behind the insect's back and the beetle turned. As it did so, Jim whipped out his pistol and, taking careful aim, fired at one of the insects.

As the sound of the shot rang out I raised my bar and leaped forward. I brought it down with crushing force on the head of the nearest beetle. My victim fell forward, and I heard Jim's pistol bark again; but I had no time to watch him. As the beetle I struck fell the others turned and I had two of them coming at me with outstretched arms, ready to grasp me. I swung my bar, and the arm of one of them fell limp; but the other seized me with both its hands, and I felt the cruel hooks of its lower arms against the small of my back.

ONE of my arms was still free; I swung my bar again, and it struck my captor on the back of the head. It was stunned by the blow and fell. I seized the knife from the floor, and threw myself down beside it and struck at its eyes, trying to roll it over so as to protect me from the other who was trying to grasp me.

I felt hands clutch me from behind; I was wrenched loose from the body of my victim and lifted into the air. I was turned about and stared hard into the implacable crystalline eyes of one of the insects. For a moment my senses reeled and then, without volition, I dropped my bar. I remembered the children and realized that I was being hypnotized. I fought against the feeling, but my senses reeled and I almost went limp, when the sound of a pistol shot, almost in my ear, roused me. The spell of the beetle was momentarily broken. I thrust the knife which I still grasped at the eyes before me. My blow went home, but the insect raised me and bent me toward him until my head lay on top of his and the huge horns which adorned his head began to close. Another pistol shot sounded, and I was suddenly dropped.

I grasped my bar as I fell and leaped up. The flyer was a shambles. Dead insects lay on all sides while Jim smoking pistol in hand, was staring as though fascinated into the eyes of one of the surviving beetles. I ran forward and brought my bar down on the insect's head, but as I did so I was grasped from behind.

"Jim, help!" I cried as I was swung into the air. The insect whirled me around and then threw me to the floor. I had an impression of falling; then everything dissolved in a flash of light. I was unconscious only for a moment, and I came to to find Jim Carpenter standing over me, menacing my assailant with his gun.

"Thanks, Jim," I said faintly.

"If you're conscious again, get up and get your bar," he replied. "My pistol is empty and I don't know how long I can run a bluff on this fellow."

I SCRAMBLED to my feet and grasped the bar. Jim stepped behind me and reloaded his pistol.

"All right," he said when he had finished, "I'll take charge of this fellow. Go around and see if the rest are dead. If they aren't when you find them, see that they are when you leave them. We're taking no prisoners."

I went the rounds of the prostrate insects. None of them were beyond moving except two whose heads had been crushed by my bar, but I obeyed Jim's orders. When I rejoined him with my bloody bar, the only beetle left alive was the commander, whom Jim was covering with his pistol.

"Take the gun," he said when I reported my actions, "and give me the bar."

We exchanged weapons and Jim turned to the captive.

"Now, old fellow," he said grimly, "either you run this ship as I want you to, or you're a dead Indian. Savvy?"

He took his pencil and notebook from his pocket and drew a sketch of our Hadley space ship. On the other end of the sheet he drew a picture of the Mercurian ship, and then drew a line connecting the two. The insect looked at the sketch but made no movement.

"All right, if that's the way you feel about it," said Jim. He raised the bar and brought it down with crushing force on one of the insect's lower arms. The arm fell as though paralyzed and a blue light played across the beetle's eyes. Jim extended the sketch again and raised the bar threateningly. The beetle moved over to the control board, Jim following closely, and set the ship in motion. Ten minutes later it rested on the ground beside the ship in which we had first taken the air.

FOLLOWING Jim's pictured orders the beetle opened the door of the Mercurian ship and followed Jim into the Hadley. As we emerged from the Mercurian ship I looked back. It had vanished completely.

"The children, Jim!" I gasped.

"I haven't forgotten them," he replied, "but they are all right for the present. If we turned them loose now, we'd have ninety reporters around us in ten minutes. I want to get our generaters modified first."

He pointed toward the spot where Mercurian ship had stood and then toward our generaters. The beetle hesitated, but Jim swung his bar against the insect's side in a vicious blow. Again came the play of blue light over the eyes; the beetle bent over our generaters and set to work. Jim handed me the bar and bent over to help. They were both mechanics of a high order and they worked well together; in an hour the beetle started the generators and swung one of the searchlights toward his old ship. It leaped into view on the radium coated screen.

"Good business!" ejaculated Jim. "We'll repair this door; then we'll be ready to release the children and start out."

WE followed the beetle into the Mercurian ship, which it seemed to be able to see. It opened a door leading into another compartment of the flyer, and before us lay the bodies of eight children. The beetle lifted the first one, a little girl, up until his many-faceted eyes looked full into the closed ones of the child. There was a flicker of an eyelash, a trace of returning color, and then a scream of terror from the child. The beetle set the girl down and Jim bent over her.

"It's all right now, little lady," he said, clumsily smoothing her hair. "You're safe now. Run along to your mother. First Mortgage, take charge of her and take her outside. It isn't well for children to see these things."

The child clung to my hand; I led her out of the ship, which promptly vanished as we left it. One by one, seven other children joined us, the last one, a miss of not over eight, in Jim's arms. The beetle followed behind him.

"Do any of you know where you are?" asked Jim as he came out.

"I do, sir," said one of the boys. "I live close to here."

"All right, take these youngsters to your house and tell your mother to telephone their parents to come and get them. If anyone asks you what happened, tell them to see Jim Carpenter to-morrow. Do you understand?"

"Yes, sir."

"All right, run along then. Now, First Mortgage, let's go hunting."

WE wired our captive up so securely that I felt that there was no possible chance of his escape; then, with Jim at the controls and me at the guns, we fared forth in search of the invaders. Back and forth over the city we flew without sighting another spaceship in the air. Jim gave an exclamation of impatience and swung on a wider circle, which took us out over the water. I kept the searchlights working. Presently, far ahead over the water, a dark spot came into view. I called to Jim and we approached it at top speed.

"Don't shoot until we are within four hundred yards," cautioned Jim.

I held my fire until we were within the specified distance. The newcomer was another of the Mercurian spaceships; with a feeling of joy I swung my beam until the cross-hairs of the screen rested full on the invader.

"All ready!" I sung out.

"If you are ready, Gridley, you may fire!" replied Jim. I pressed the gun button. The crash of the gun was followed by another report from outside as the radite shell burst against the Mercurian flyer. The deadly explosive did its work, and the shattered remains of the wreck fell, to be engulfed in the sea below.

"That's one!" cried Jim. "I'm afraid we won't have time to hunt up the other right now. This bug told me that the other Mercurians are due here to-day, and I think we had better form ourselves into a reception committee and go up to the hole to meet them."

HE sent the ship at high speed over the city until we hovered over the laboratory. We stopped for a moment, and Jim stepped to the radio telephone.

"Hello, Williams," he said, "how are things going? That's fine. In an hour, you say? Well, speed it up as much as you can; we may call for it soon."

He turned both stern motors to full power, and we shot up like a rocket toward the hole in the protective layer through which the invaders had entered. In ten minutes we were at the altitude of the guard ships and Jim asked if anything had been seen. The report was negative; Jim left them below the layer and sent our flyer up through the hole into space. We reached the outer surface in another ten minutes and we were none too soon. Hardly had we debouched from the hole than ahead of us we saw another Mercurian flyer. It was a lone one, and Jim bent over the captive and held a hastily made sketch before him. The sketch showed three Mercurian flyers, one on the ground, one wrecked and the third one in the air. He touched the drawing of the one in the air and pointed toward our port hole and looked questioningly at the beetle. The insect inspected the flyer in space and nodded.

"Good!" cried Jim. "That's the third of the trio who came ahead as scouts. Get your gun ready, First Mortgage: we're going to pick him off."

Our ship approached the doomed Mercurian. Again I waited until we were within four hundred yards; then I pressed the button which hurled it, a crumpled wreck, onto the outer surface of the heaviside layer.

"Two!" cried Jim as we backed away.

"Here come plenty more," I cried as I swung the searchlight. Jim left his controls, glanced at the screen and whistled softly. Dropping toward us from space were hundreds of the Mercurian ships.

"We got here just in time," he said. "Break out your extra ammunition while I take to the hole. We can't hope to do that bunch alone, so we'll fight a rearguard action."

SINCE our bow gun would be the only one in action, I hastily moved the spare boxes of ammunition nearer

to it while Jim maneuvered the Hadley over the hole. As the Mercurian fleet came nearer he started a slow retreat toward the earth. The Mercurians overtook us rapidly; Jim locked his controls at slow speed down and hurried to the bow gun.

"Start shooting as soon as you can," he said. "I'll keep the magazine filled."

I swung the gun until the cross-hairs of the screen rested full on the leading ship and pressed the button. My aim was true, and the shattered fragments of the ship fell toward me. The balance of the fleet slowed down for an instant; I covered another one and pressed my button. The ship at which I had aimed was in motion and I missed it, but I had the satisfaction of seeing another one fall in fragments. Jim was loading the magazine as fast as I fired. I covered another ship and fired again. A third one of our enemies fell in ruins. The rest paused and drew off.

"They're retreating, Jim!" I cried.

"Cease firing until they come on again," he replied as he took the shells from the magazines of the other guns and piled them near the bow gun.

I held my fire for a few minutes. The Mercurians retreated a short distance and then came on again with a rush. Twenty times my gun went off as fast as I could align it and press the trigger, and eighteen of the enemy ships were in ruins. Again the Mercurians retreated. I held my fire. We were falling more rapidly now and far below we could see the black spots which were the guard ships. I told Jim that they were in sight; he stepped to the radio telephone and ordered them to keep well away from the hole.

AGAIN the Mercurian ships came on with a rush, this time with beams of orange light stabbing a way before them. When I told Jim of this he jumped to the controls and shot our ship down at breakneck speed.

"I don't know what sort of fighting apparatus they have, but I don't care to face it," he said to me. "Fire if they get close; but I hope to get out of the hole before they are in range."

Fast as we fell, the Mercurians were coming faster, and they were not over eight hundred yards from us when he reached the level of the guard ships. Jim checked our speed; I managed to pick off three more of the invaders before we moved away from the hole. Jim stopped the side motion and jumped to the radio telephone.

"Hello, Williams!" he shouted into the instrument. "Are you ready down there? Thank God! Full power at once, please!

"Watch what happens," he said to me, as he turned from the instrument.

Some fifty of the Mercurian flyers had reached our level and had started to move toward us before anything happened. Then from below came a beam of intolerable light. Upward it struck, and the Mercurian ships on which it impinged disappeared in a flash of light.

"A disintegrating ray," explained Jim. "I suspected that it might be needed and I started Williams to rigging it up early this morning. I hated to use it because it may easily undo the work that six years have done in healing the break in the layer, but it was necessary. That ends the invasion, except for those ten or twelve ships ahead of us. How is your marksmanship? Can you pick off ten in ten shots?"

"Watch me," I said grimly as the ship started to move.

PRIDE goeth ever before a fall: it took me sixteen shots to demolish the eleven ships which had escaped destruction from the ray. As the last one fell in ruins, Jim ordered the ray shut off. We fell toward the ground.

"What are we going to do with our prisoner?" I asked.

Jim looked at the beetle meditatively.

"He would make a fine museum piece if he were stuffed," he said, "but on

the whole, I think we'll let him go. He is an intelligent creature and will probably be happier on Mercury than anywhere else. What do you say that we put him on his ship and turn him loose?"

"To lead another invasion?" I asked.

"I think not. He has seen what has happened to this one and is more likely to warn them to keep away. In any event, if we equip the guard ships with a ray that will show the Mercurian ships up and keep the disintegrating ray ready for action, we needn't fear another invasion. Let's let him go."

"It suits me all right, Jim, but I hold out for one thing. I will never dare to face McQuarrie again if I fail to get a picture of him. I insist on taking his photograph before we turn him loose."

"All right, go ahead," laughed Jim. "He ought to be able to stand that, if you'll spare him an interview."

An hour later we watched the Mercurian flyer disappear into space.

"I hope I've seen the last of those bugs," I said as the flyer faded from view.

"I don't know," said Jim thoughtfully. "If I have interpreted correctly the drawings that creature made, there is a race of manlike bipeds on Mercury who are slaves to those beetles and who live and die in the horrible atmosphere of a radium mine. Some of these days I may lead an expedition to our sister planet and look into that matter."

MECHANICAL VOICES FOR PHONE NUMBERS

NEW developments whereby science goes still farther in its assumption of human attributes were described and demonstrated recently by Sergius P. Grace, Assistant Vice-President of Bell Telephone Laboratories, where the developments were conceived and worked out.

One development described, and soon to be put into service in New York, transforms a telephone number dialed by a subscriber into speech. Although the subscriber says not a word the number dialed is spoken aloud to the operator.

This device is expected to simplify and speed the hooking together of automatic and voice-hand-operated telephone exchanges, and also to speed long-distance calls from automatic phones through rural exchanges.

The numbers which can thus be spoken are recorded on talkie films and those which are to go into use here have already been made, all by an Irish girl said to have the best voice among the city's "number, please" girls.

Mr. Grace demonstrated this device by carrying into the audience a telephone with a long cord connected with a loud speaker on the stand, which represented central. A member of the audience was requested to dial a number, and chose 8561-T, the letter T representing the exchange.

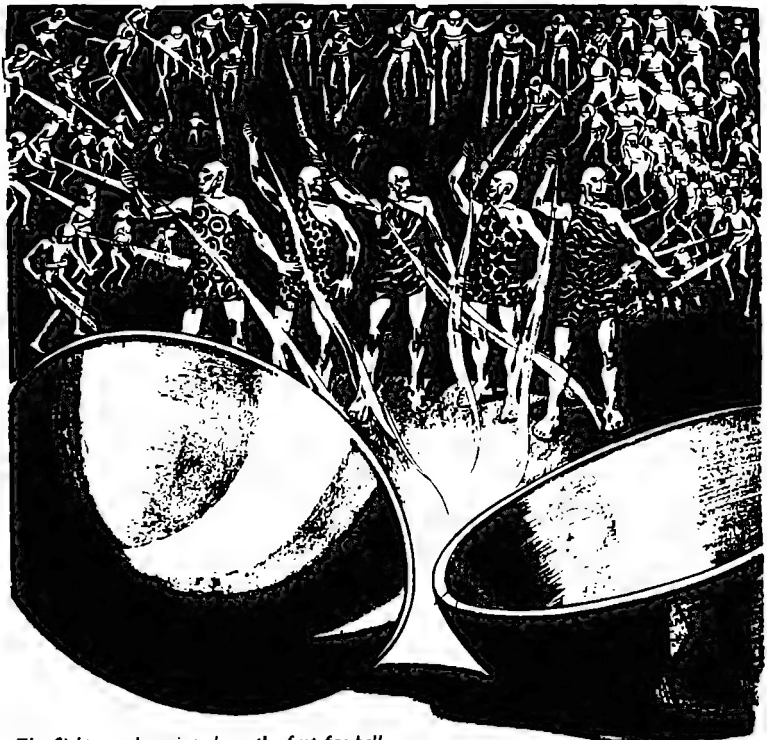
This number the spectator dialed on the phone Mr. Grace carried. There was no sound but the clicking of the dial. Then, two seconds later, the loudspeaker spoke up clearly, in an almost human voice, "8651 T."

As for the recording of the sound films, there is a film for each of the ten Arabic numerals from zero to nine, and these wound on revolving drums. The dial on the telephone automatically sets in action the drum corresponding to the numeral moved on the dial.

Another development which sounds promising for bashful suitors and other timid souls, enables a person to store within himself electrically a message he desires to deliver and then to deliver it without speaking, simply by putting a finger to the ear of the person for whom the message is intended.

This Mr. Grace demonstrated. He spoke into a telephone transmitter and his words were clearly heard by all in the audience by means of amplifiers. At the same time a part of the electrical current from the amplifier, representing the sentence he voiced, was stored in a "delay circuit," another recent invention of the laboratories. After being stored four and a half seconds this current was transformed to a high voltage and passed into Mr. Grace's body. He then put his finger against the ear of a member of the audience, who heard in his brain the same sentence. The ear drum and surrounding tissues are made to act as one plate of a condenser-receiver, Mr. Grace explained, with the vibrations of the drum interpreted by the brain.

A new magnetic metal, "perminvar," and a new insulating material, "para gutta," which make possible construction of a telephone cable across the Atlantic to supplement the radio systems, were also described. Actual construction of the cable is expected to be started in 1930, Mr. Grace said.



The flight was hovering above the first fire-ball.

Earth, the Marauder

CONCLUSION OF A THREE-PART NOVEL

By Arthur J. Burks

CHAPTER XIX

Desolation

STRANGER, more thrilling even than had been the flight of the Earth after being forced out of its orbit, was the flight of those dozen aircars of the Moon, bearing the rebels of Dalis' Gens back to Earth.

For the light which glowed from the bodies of the rebels, which had been given them by their passage through the white flames, was transmitted to the cars themselves, so that they glowed as with an inner radiance of their own—like comets flashing across the night.

Strange alchemy, which Sarka wondered about and, wondering, looked ahead to the time when he should be able, within his laboratory, to analyze the force it embodied, and

Martian fire-balls and the terrific Moon-cubes wreak tremendous destruction on helpless Earth in the final death struggle of the warring worlds.

thus gain new scientific knowledge of untold value to people of the Earth.

As the cars raced across outer darkness, moving at top speed, greater than ever attained before by man, greater than even these mighty cars had traveled, Sarka looked ahead, and wondered about the fearful report his father had just given him.

That there was an alliance between Mars and the Moon seemed almost unbelievable. How had they managed the first contact, the first negotiations leading to the compact between two such alien peoples? Had there been any flights exchanged by the two worlds, surely the scientists of Earth would have known about it. But there had not, though there had been times and times when Sarka had peered closely enough at the surface of both the Moon and of Mars to see the activities, or the results of the activities, of the peoples of the two worlds.

Somehow, however, communication, if Sarka the Second had guessed correctly, had been managed between Mars and the Moon; and now that the Earth was a free flying orb the two were in alliance against it, perhaps for the same reason that the Earth had gone a-voyaging.

SIDE by side sat Sarka and Jaska, their eager eyes peering through the forward end of the flashing aircar toward the Earth, growing minute by minute larger. They were able, after some hours, to make out the outlines of what had once been continents, to see the shadows in valleys which had once held the oceans of Earth. . . .

And always, as they stared and literally willed the cubes which piloted and were the motive power of the aircars to speed and more speed, that marvelous display of interplanetary fireworks which had aroused the concern of Sarka the Second.

What were those lights? Whence did they emanate? Sarka the Second had said that they came from Mars, yet Mars was invisible to those in the speeding aircars, which argued that it was hidden behind the Earth. There was no way of knowing how close it was to the home of these rebels of Dalis' Gens.

And ever, as they flashed forward, Sarka was recalling that vague hint on the lips of Jaska, to the effect that Luar, for all her sovereignty of the Moon, might be, nonetheless, a native of the Earth. But. . .

How? Why? When? There were no answers to any of the questions yet. If she were a native of Earth, how had she reached the Moon? When had she been sent there? Who was she? Her name, Luar, was a strange one, and Sarka studied it for many minutes, rolling the odd syllables of it over his tongue, wondering where, on the Earth, he had hear names, or words, similar to it. This produced no result, until he tried substituting various letters; then, again, adding various letters. When he achieved a certain result at last, he gasped, and his brain was a-whirl.

LUAR, by the addition of the letter *n*, between the *u* and the *a*, became Lunar, meaning "of the Moon!" Yet Lunar was unmistakably a word derived from the language of the Earth! It was possible, of course, that this was mere coincidence; but, taken in connection with the suspicions of Jaska, and the incontrovertible fact that Luar resembled people of the Earth, Sarka did not believe in this particular whim of coincidence.

Who was Luar?

His mind went back to the clucking sounds which, among the Gnomes of the Moon, passed for speech. He pondered anew. He shaped his lips, as nearly as possible, to make the clucking sounds he had heard, and discovered that it was very difficult to manage the letter *n!*

The conclusion was inescapable: This woman, Luar, had once been *Lunar*, the *n*, down the centuries, being dropped because difficult for the Gnomes to pronounce.

"Yes, Jaska," he said suddenly, "somewhere on Earth, when we reach it, we may discover the secret of Luar —and know far more about Dalis than we have ever known before!"

Jaska merely smiled her inscrutable smile, and did not answer. By intuition, she already knew. Let Sarka arrive at her conclusion by scientific methods if he desired, and she would simply smile anew.

Sarka thought of the manner in which Jaska and he had been transported to the Moon; of how much Dalis seemed to know of the secrets of the laboratory of the Sarkas. Might he not have known, two centuries ago, of the Secret Exit Dome, and somehow managed to make use of it in some ghastly experiment? And still the one question remained unanswered: Who was Luar?

THE Earth was now so close that details were plainly seen. The Himalayas were out of sight, over the Earth, and by a mental command Sarka managed to change slightly the course of the dozen aircars. By passing over the curve of the Earth at a high altitude, he hoped also to see from above something of the result of the strange aerial bombardment of which his father had spoken.

In their flight, which had been, to them a flight through the glories of a super-heavenly Universe, they had lost all count of time. Neither Sarka nor Jaska, nor yet the people in those other aircars, could have told how long they had been flying, when, coming over the curve of the Earth, at an elevation of something like three miles, they were able at last to see into the area which had once housed the Gens of Dalis.

A gasp of horror escaped the lips of Sarka and of Jaska.

The Gens of Dalis had occupied all the territory northward to the Pole, from a line drawn east and west through the southernmost of what had once been the Hawaiian Islands. Upon this area had struck the strange blue light from the deep Cone of the Moon.

Here, however, the light was invisible, and Sarka flew on in fear that somehow his aircars would blunder into it, and be destroyed—for that the blue light was an agent of ghastly destruction became instantly apparent.

THE dwellings of the Gens of Dalis were broken and smashed into chaotic ruins. Over all the area, and even into the area of the Gens southward of that which had been Dalis, the blind gods of destruction had practically made a clean sweep. Sarka had opportunity to thank God that, at the time the blue column had struck the Earth, it had struck at the spot which had been almost emptied of people, and realized that blind chance had caused it. For, in order for the Gens of Dalis to be in position to launch their attack against the Moon, he had managed, by manipulating the speed of the Beryls, to bring that area into position directly opposite the Moon.

Had it been otherwise, the blue column might have struck anywhere, and wiped out millions of lives!

"God, Jaska," murmured Sarka. "Look!"

Think of a shoreline, once lined with mighty buildings, after the passage of a tidal wave greater than ever before known to man. The devastation would be indescribable. Multiply that shoreline by the vast area which had housed the Gens of Dalis, and the mental picture is almost too big to grasp. Chaos, catastrophe, approaching an infinity of destruction.

The materials of which the vast buildings, set close together, had been made, had been twisted into grotesque, nightmarish shapes, and the whole fused into a burned and gleaming mass —which covered half of what had once been a mighty ocean—as though a bomb larger and more devastating than ever imagined of man, a bomb large enough to rock the Earth, had landed in the midst of the area once occupied by the Gens of Dalis!

Yet, Sarka knew, remembering the murmuring of the blue column as it came out of the cone, all this devastation had been caused in almost absolute silence. People could have watched and seen these deserted buildings slowly fuse together, run together as molten metal runs together, like the lava from a volcano of long ago under the ponderous moving to and fro of some invisible, juggernautlike agency.

SARKA shuddered, trying to picture in his mind the massing of the minions of Mars, who thus saw a new country given into their hands—if they could take it. Had the Earth been taken by surprise? Had Sarka the Second been able to prepare for the approaching catastrophe?

"Father," he sent his thoughts racing on ahead of him, "are those lights which are striking the Earth causing any damage?"

"Only," came back the instant answer, "in that they destroy the courage of the people of the Earth! The people, however, now know that Sarka is returning, and their courage rises again! The flames are merely a hint of what faces us; but the people will rise and follow you wherever you lead!"

So, as they raced across the area of devastation, the face of Sarka became calm again. On a chance, he sent a single sentence of strange meaning to his father.

"The ruler of the Moon is a woman called Luar, which seems a contraction of Lunar!"

For many minutes Sarka the Second made no answer. When it came it startled Sarka to the depths of him, despite the fact that he had expected to be startled.

"There *was* a woman named Lunar!"

CHAPTER XX

Sarka Commands Again

AHEAD, through the storms which still hung tenaciously to the roof of the world, flashed those dozen aircars of the Moon. Now Sarka could plainly see the dome of his laboratory, and from the depths of him welled up that strange glow which Earthlings recognize as the joy of returning home, than which there is none, save the love for a woman, greater.

Now he could see the effect of those flares, or lights, from Mars, which impinged on the face of the Earth, though he could see no purpose in them, no reason for their being, since they seemed to do no damage at all, though the effect of them was weird in the extreme.

Outer darkness, rent with ripping, roaring storms, flurries of ice, snow and sleet, shot through and through by balls of lambent flames in unguessable numbers. Eery lights which struck the surface of the Earth, bounded away and, half a mile or so from the surface again, burst into flaming pinwheels, like skyrockets of ancient times. Strange lights, causing weird effects, but producing no damage at all, save to lessen to some extent the courage of Earthlings, because they did not understand these things. And always, down the ages, man had stood most in fear of the Unknown.

SARKA peered off across the heavens where a ball of flame now seemed to be rising over the horizon, and was amazed at the size of this planet. Mars was close to Earth, so close that, had they possessed aircars like those of the Moon-people—which remained to be seen—they could easily have attacked the Earth.

Across the face of the Earth flashed those fiery will-o'-the-wisps from Mars, without rhyme or reason; yet Sarka knew positively that they possessed some meaning, and that the Earth had been forced thus close to Mars for a purpose. What that purpose was must yet be discovered.

Then, under the aircars, the laboratory of Sarka.

Down dropped the aircars to a landing near the laboratory, and to the

cubes in the forepeak of each Sarka sent the mental command:

"Assure yourselves that the aircars will remain where they are! Muster inside the laboratory, keeping well away from the Master Beryl!"

Then to the people who had returned, clothed in strange radiance, from the Moon with Sarka and with Jaska he spoke:

"Leave the cars and enter my laboratory, where further orders will be given you!"

With Jaska still by his side, Sarka entered the laboratory through the Exit Dome. Inside, clothing was swiftly brought for the rebels, for Sarka and for Jaska. But, even when they were clothed, these people who had come back seemed to glow with an inner radiance which transfigured them.

Sarka the Second, his face drawn and pale, came from the Observatory to meet his son, and the two were clasped in each other's arms for a moment. Sarka the Second, who had looked no older than his son, seemed to have aged a dozen centuries in the time Sarka had been gone.

But it was not of the threatened attack by Martians that Sarka the Second spoke. He made no statement. He merely asked a question:

"Was Lunar very beautiful, and just a bit unearthly in appearance?"

SARKA started.

"Yes. Beautiful! Wondrously, fearfully beautiful; but I had the feeling that she had no heart or soul, no conscience; that she was somehow—well, bestial!"

A moan anguish escaped Sarka the Second.

"Dalis again!" he ejaculated. "But much of the fault was mine! Before you were born, we scientists of Earth had already several times realized the necessity of expansion for the children of Earth if they were to continue. Dalis' proposal to my father was discarded, because it involved the wholesale taking of life. But after the oceans had been obliterated, and the human family still outgrew its bounds, Dalis came to my father and me with still another proposal. It involved a strange, other-worldly young woman whom he called Lunar! Her family—well, nothing was known about her, for her family could not be traced. Wiped out, I presume, in some inter-family quarrel, leaving her alone. Dalis found her, took an interest in her, and the very strangeness of her gave him his idea, which he brought to my father and me.

"His proposal was somewhat like that which you made when we sent the Earth out of its orbit into outer space, save that Dalis' scheme involved no such program. His was simply a proposal to somehow communicate with the Moon by the use of an interplanetary rocket that should carry a human passenger.

"He put the idea up to this girl, Lunar, and she did not seem to care one way or another. Dalis was all wrapped up in his ideas, and gave the girl the name of Lunar, as being symbolical of his plans for her. He coached and trained her against the consummation of his plan. We knew something, theoretically at least, about the conditions on the Moon, and everything possible was done for her, to make it feasible for her to exist on the Moon. My error was in ever permitting the experiment to be made, since if I had negatived the idea, Dalis would have gone no further!

"But I, too, was curious, and Lunar did not care. Well, the rocket was constructed, and shot outward into space by a series of explosions. No word was ever received from Lunar, though it was known that she landed on the Moon!

"I SAY no word was ever received. yet what you have intimated proves that Dalis has either been in mental communication with her, hoping to induce her to send a force against the Earth, and assist him in mastering

the Earth, overthrowing we Sarkas—
—or has been biding his time against something of the thing we have now accomplished."

This seemed to clear up many things for Sarka, though it piled higher upon his shoulders the weight of his responsibilities. The other-worldliness of Lunar, called now Luar, explained her mastery of the Gnomes, and through them the cubes, and her knowledge of the omnipotent qualities of the white flames of the Moon's core, which might have been, it came to Sarka in a flash, the source of all life on the Moon in the beginning!

"But father," went on Sarka, "I don't see any sense in this aerial bombardment by Mars!"

"I believe," said Sarka the Second sadly, "that before another ten hours pass we shall know the worst there is to be known; but now, son, instead of going into attack against the Moon, we go into battle against the combined forces of Mars and of the Moon!"

SARKA now took command of the forces of the Earth. Swiftly he turned to the people of the Gens of Dalis who had come back with him.

"You will be divided into eleven equal groups, as nearly as possible. Father, will you please arrange the division? Each group will be attached to the staff of one of the Spokesman of the Gens, so that each Spokesman will have the benefit of your knowledge with reference to conditions on the Moon. Each group will re-enter its particular aircar, retaining control of the cube in each case, of course, and will at once repair to his proper station. Telepathy is the mode of communication with the cubes, and you rule them by your will. Each group, when assembled by my father, will choose a leader before quitting this laboratory, and such leader will remain in command of his group, under the overlordship of the Spokesman to whom he reports with his group. You understand!

"Your loyalty is unquestioned. You will consecrate your lives to the welfare of the Gens to which you are going, since you no longer have a Gens of your own!"

Sarka turned to the cubes, which had formed in a line just inside the Exit Dome, and issued a mental command to the cube that had piloted his aircar from the Moon. The cube faded out instantly, appearing immediately afterward on the table of the vari-colored lights.

"Father," said Sarka, "while I am issuing orders to the Spokesmen, please see if you can discover the secret of these cubes: how they are actuated, the real extent of their intelligence! The rest of you, with your cubes, depart immediately and report to your new Gens!"

WITHIN ten minutes the divisions had been made, and the Radiant People had entered the aircars and, outside the laboratory, risen free of the Earth, and turned, each in its proper direction, for the Gens of its assignment. The Sarkas and Jaska watched them go.

There remained but one aircar, standing outside on half a dozen of those grim tentacles, with two tentacles swinging free, undulating to and fro like serpents. Harnessed electricity actuating the tentacles—cars and tentacles subservient to the cubes.

The aircars safely on their way, Sarka stepped to the Master Beryl, tuned it down to normal speed, and signalled the Spokesmen of the Gens.

"The Moon and Mars are in alliance against us, and Dalis has allied himself and his Gens with the ruler of the Moon! I don't know yet what form the attack will take, but know this: that the safety of the world, of all its people, rests in your hands, and that the war into which we are going is potentially more vast than expected when this venture began, and more devastating than the fight with the aircars of the Moon! Coming to you, in aircars

which we managed to take from the Moon-people, are such of the people of the Gens of Dalis as were able to return with me. Question them, gather all the information you can about them, and through them keep control of the cubes which pilot the aircars, for in the cubes, I believe, lies the secret of our possible victory in the fight to come!"

SARKA scarcely knew why he had spoken the last sentence. It was as though something deep within him had risen up, commanded him to speak, and deeper yet, far back in his consciousness, was a mental picture of the devastation he had witnessed on his flight above the area that had once housed the Gens of Dalis.

For in that ghastly area, he believed, was embodied an idea greater than mere wanton destruction, just as there was an idea back of the fiery lights from Mars greater than mere display. Somehow the two were allied, and Sarka believed that, between the blue column, and the fiery lights from Mars, the fate of the world rested.

He could, he believed, by manipulation of the Beryls that yet remained, maneuver the world away from that blue column—which on the Earth was invisible. But to have done so would have thwarted the very purpose for which this mad voyage had been begun. The world had been started on its mad journey into space for the purpose of attacking and colonizing the Moon and Mars.

The Moon had been colonized by the Gens of Dalis, already in potential revolt against the Earth. Mars was next, and by forcing the Earth into close proximity to Mars the people of the Moon had played into the hands of Earth-people—if the people of Earth were capable of carrying out the program of expansion originally proposed by Sarka!

If they were not . . . well, Sarka thought somewhat grimly, the resultant cataclysmic war would at least solve the problem of over-population! Inasmuch as the Earth was already committed to whatever might transpire, Sarka believed he should take a philosophic view of the matter!

SARKA turned to an examination of the Master Beryl, and even as he peered into the depths of it, he thought gratefully how nice it was to be home again, in his own laboratory, upon the world of his nativity. He even found it within his heart to feel somewhat sorry for Dalis, and to feel ashamed that he had, even in his heart, mistreated him.

Then he thought, with a tightening of his jaw muscles, of the casual way in which Dalis had destroyed Sarka the First, of his forcing his people to undergo the terrors of the lake of white flames without telling them the simple secret; of his betrayal of the Earth in his swift alliance with Luar; or Luar herself when, as Lunar, a strange waif of Earth, Dalis had sent her out as the first human passenger aboard a rocket to the Moon. All his pity vanished, though he still believed he had done right in sparing Dalis' life.

Suddenly there came an ominous humming in the Beryl, and simultaneously signals from the vari-colored lights on the table. Sarka whirled to the lights, noting their color, and mentally repeating the names of the Spokesmen who signalled him.

Even before he gave the signal that placed him in position to converse with them, he noted the strange coincidence. The Spokesmen who desired speech with him were tutelary heads of Gens whose borders touched the devasted area where Dalis had but recently been overlord!

An icy chill caressed his spine as he signalled the Spokesmen to speak.

"Yes, Vardee? Prull? Klaser? Cleric?"

THE report of each of them was substantially the same, though couched in different words, words

freighted heavily with strange terror.

"The devasted area has suddenly broken into movement! Throughout that portion of it visible from my Gens area, the fused mass of debris is bubbling, fermenting, walking into life! An aura of unearthly menace seems to flow outward from this heaving mass, and the whole is assuming a most peculiar radiance—cold gleaming, like distant starshine!"

"Wait!" replied Sarka swiftly. "Wait until the people I have sent you have arrived! Report to me instantly if the movement of the mass is noticeably augmented, and especially so if it seems to be breaking up, or coagulating into any sort of form whatever!"

Then he dimmed the lights, indicating that for the moment there was nothing more to be said. Just then his father, face very gray and very old, entered the room of the Master Beryl from the laboratory.

"Son!" he said. "The crisis is almost upon us! The Martians are coming!"

CHAPTER XXI

Cubes of Chaos

SARKA raced into the Observatory, wondering as he ran how the attack of the Martians would manifest itself; but scarcely prepared for the brilliant display which greeted his gaze. Compared to the oncoming flames from Mars, the preceding display of lights had been as nothing. The whole Heavens between the Earth and Mars seemed alight with an unearthly glare, as though the very heart of the sun had burst and hurled part of its flaming mass outward into space.

On it came with unbelievable speed. But there was no telling, yet, the form of the things which were coming.

"What are they?" whispered Jaska, standing fearlessly at Sarka's side. "Interplanetary cars? Rockets? Balls of fire? Or beings of Mars?"

"I think," said Sarka, after studying the display for a few minutes, that they are either rockets or fireballs, perhaps both together! But the Martians cannot consolidate any position on the Earth without coming to handgrips. Since they must know this, we can expect to see the people of Mars themselves, when, or soon after, those balls of fire strike the Earth!"

Sarka raced back to the room of the Master Beryl as a strident humming came through to him.

THE Spokesmen of the Gens whose borders touched those of the devasted Dalis area, were reporting again, and their voices were high pitched with fear that threatened to break the bounds of sanity.

"The ferment in the devasted area," was the gist of their report, "is assuming myriads of shapes! The fused mass has broken up into isolated masses, and each mass of itself is assuming one of the many forms!"

"What forms?" snapped Sarka. "Quickly!"

"Cubes! Thousands and millions of cubes, and the cubes themselves are forming into larger cubes, some square, some rectangular! In the midst of these formations are others, mostly columnar, each column consisting of cubes which have coalesced into the larger form from the same small cubes! The columnar formations are topped by globes which emit an ethereal radiance!"

"Listen!" Sarka's voice was vibrant with excitement. "Spokesmen of the Gens, make sure that every individual member of your Gens is fully equipped with flying clothing, including belts and ovoids—prepared for an indefinite stay outside on the roof of the world! Get your people out swiftly, keeping them in formation! Keep about you those people of Dalis whom I sent you, and understand before you break contact with your Beryls, that instructions received from these people come from me! In turn, after you have quitted the hives, anything you wish to say to me you can repeat to any one of the glowing people of Dalis!"

The contacts were broken. Sarka stared into the Beryl, glancing swiftly in all directions, to see whether his orders were obeyed.

Out of the myriads of hives were flying the people of all the Gens of Earth, their vast numbers already darkening the roof of the world. The advance fires from Mars seemed to have no effect on them, which Sarka had expected, since the fires seemed to consume nothing they had touched previously.

BY millions the people came forth. People dressed in the clothing of this Gens or that, wearing each the insignia of the house of his Spokesman. A brave show. Sarka could see the faces of many, now in light, now in shadow, as the advance fires of Mars lighted them for a moment in passing, then left them in shadow as the bursting balls of fire faded and died.

Strange, too, that the fireballs made no noise. Noiseless flame which rebounded from the surface of the Earth broke in silence, deluging the heavens with shooting stars of great brilliance. Through its display flew the people of the Gens, mustering in flight above flight, each to his own level, under command of the Spokesmen of the Gens.

"How long, father," queried Sarka, "should it take to empty the Gens areas?"

"The people of Earth have been waiting for word to go into battle since we first sent the people of Dalis against the Moon-men. They still are ready! The dwellings of our people, *all* of them, can be emptied within an hour!"

"I wonder," mused Sarka, "if that is soon enough!"

Perhaps yes, perhaps no. It would be a race, in any case. Sarka divided his attention between the rapidly changing formations of the Moon-cubes in that devasted area, and the onrushing charge of the fire-balls from Mars. All were visible to him through the Master Beryl, and from the Observatory, though the Martian fire-balls were now so close that the vanguard of them could even be seen in the Master Beryl, adjusted to view only activities on the surface of the Earth.

Even as the last flights of the Gens of Earth were slipping into the icy air from the roof of the world, the Moon-cubes began their terrifying, appalling attack, every detail of which could be seen by Sarka from the Master Beryl.

THOSE columns, composed of cubes, seemed to be the leaders of a vast cube-army. The top of each of them was a gleaming globe whose eery light played over the country immediately surrounding each column, their weird light reflected in the squares, rectangles and globes that other cubes had formed.

Sarka sought swiftly among the columns for the one which might conceivably be in supreme command; but even as he sought the Moon-cubes moved to the attack. The globes on the tops of the columns dimmed their lights, and the squares, rectangles and globes got instantly into terrible motion.

Southward from the position in which they had formed they began to move, the squares and rectangles apparently sliding along the surface of the scarred and broken soil, the globes rolling.

Southward there was the vast wall of the Gens that bordered the devasted area in that direction, and the cube-army was instantly at full charge toward this, in what Sarka realized was to be a war of demolition!

Within a minute, Sarka was conscious of a trembling of all the laboratory, and the eyes of Jaska were wide with fear. Swiftly the trembling grew, until sound now was added to the vast, awesome tremor—a vast, roaring crescendo of sound that mounted and mounted as the speed of the cube-army increased. The vanguard of the cube-army struck the dwelling of the Gens southward of that of Dalis, and a

mighty, rocketing roar sounded in the Master Beryl, was audible inside the laboratory, even without the aid of the Beryl, at whose surface Sarka stared as a man fascinated, hypnotized.

THE cube-army struck the dwellings, disappeared into them as though they had been composed of tissue paper, and continued on! Over the tops of the cube-army toppled the roofs of the dwellings, there, in the midst of the cubes, to be ground to powder, with a sound as of a million avalanches grinding together in some awesome, sun-size valley. Southward, in the wake of the chaotic charge, moved a mighty, gigantic crevasse, whose sides were the walls of the hives left standing. And still the cube-army moved in, grinding everything it touched to dust, trampling buildings into nothingness, destroying utterly along a front hundreds of miles wide, and as deep as the dwellings of men!

"God!" cried Sarka, his voice so tense that both his father and Jaska heard it above the roaring which shook and rocked the world. "Do you see? The Moon-cubes are destroying the dwelling of our people, and the Martians are to destroy the people who have fled!"

"There must be a way," said Sarka the Second quietly, "to circumvent the cubes! But what? Your will still rules the cubes which piloted you from the Moon?"

"Yes," replied Sarka tersely, "but there are only a dozen of the cubes. What can they do against countless millions of them? Cubes which are Moon-cubes, brought to the Earth in the heart of that blue column, here reformed to create an army which is invincible, because it cannot be slain! It means that the Moon-people themselves, thousands of miles out of our reach, have but to sit in comfort and watch their cube-slaves destroy us! When they have laid waste the Earth, the Martians have but to finish the fight!"

"IF, beloved," said Jaska, "your will commands those twelve cubes, it can also command all the others, for they must be essentially the same. Call on the rebels of Dalis to help you!"

"Then what of the Spokesmen of the Gens, who will be out of contact with me?"

"They must stand on their own feet, must fight their own battle! Call to you the people who have passed through the white flames, and fight with the distant will of Luar and of Dalis for control of the cube-army!"

Again that exaltation, which convinced him he could move mountains with his two hands, coursed through the being of Sarka.

Quietly he answered Jaska.

"I believe you are right," he said softly. "Those of us who have passed through the flames which bore these Moon-cubes will control the cubes, even bend them to our will. The Spokesmen must vanquish the Martians or perish!"

Then he sent his mental commands to the Spokesmen:

"Meet the Martians when they arrive and destroy or drive them back! You live only if you win! We speak no more until victory is ours! People of the Gens of Dalis, go to the areas being devasted by the cubes, taking your cubes and aircars with you, and I will join you there! *And Jaska with me!*"

Sarka had not himself mentally spoken the last four words. Jaska had thought-spoken them, before he could prevent. He turned upon her, lips shaping a command that she remain behind. But she forestalled him.

"I, too, have been through the white flames! You may have need of all of us!"

CHAPTER XXII

The Struggle for Mastery

THE people of all the Gens of Earth were now between two fires. The cube-army, ruled by the mistress

of the Moon, was laying waste the dwellings of the Gens, destroying them with a speed and surety of which no earthquake, whatever its proportions, would have been capable. The Gens were forced out upon the roof of the world—where, scarcely had they maneuvered into their prearranged formations, than the Martians struck.

Those huge balls of fire, larger even than the aircars of the Moon, landed in vast and awe-inspiring numbers on the roof of the world—landed easily, with no apparent effort or shock. The light of them made all the world a place of vast radiance, save only that portion which was being destroyed by the cube-army, and this area had a cold, chill radiance of its own.

By groups and organizations the fire-balls of Mars landed, and rested quiescent on the surface of the globe.

Sarka, pausing only long enough in his laboratory to study this strange attack and to discover how it would get under way, was at the same time preparing to go forth to take his own strange part in the defensive action of Earthlings. A vast confidence was in him. . . .

"We will lose millions of people, father," he said softly. "But it will end in our victory, in the most glorious war ever fought on this Earth!"

"That is true, my son!" replied the older man sadly.

FOR several minutes the vast fire-balls, which seemed to be monster glowing octagons, rested where they had landed, and even then the Gens of the people were closing on them, bringing their ray directors and atom-disintegrators into action.

Then, when the Earthlings would have destroyed the first of the vast fire-balls—and Sarka was noting that the flames which bathed the balls seemed to have no effect whatever on Earthlings, save to outline them in mantles of fire—the fire-balls wakened to new life.

They opened like the halves of peaches falling apart, and out upon the roof of the world poured the first Martians Earth had ever seen!

They were more than twice the size, on the average, of Earth people, and at first glance seemed to resemble them very much, save that their eyes, of which each Martian was possessed of two, were set on the ends of long tentacles which could stretch forth to a length of two feet or more from the eye-sockets and thus be turned in any direction. Each eye was independent of its neighbor, as one could look forward while the other looked backward, or one could look right while the other looked left.

Each Martian possessed two arms on each side of a huge, powerful torso, and legs that were like the bolls of trees, compared to the slender limbs of Earthlings. All the Martians seemed to be dressed in the skins of strange, vari-colored beasts. Each carried in his upper right hand a slender canelike thing some three feet in length, from whose tip there flashed those spurts of flame which had puzzled the Earth people before the actual launching of the attack.

BEYOND these weapons, the Martians seemed to possess no weapons of offense at all, nor of defense.

"With our ray directors and atom-disintegrators," said Sarka, moving into the Exit Dome with Jaska, "we can blast them from the face of the Earth!"

But in a moment he realized that he had spoken too hastily.

The nearest fire-ball was, of course, within the area of the Gens of Cleric, and Sarka could here see with his naked eyes all that transpired. The Martian passengers, who moved swiftly away from their fire-ball vehicles, than a flight of the Gens of Cleric descended upon the fireball and its fleeing passengers, with tiny ray directors and atom-disintegrators held to the fore, ready for action.

The Martians, at some distance from

their glowing vehicle, paused and formed a ragged line, facing the ball, staring at the descending people of the Gens of Cleric, their tentaclelike eyes waving to and fro, oddly like the tentacles of those aircars of the Moon.

The flight was hovering above the first fireball. In a second now, at the command of an underling, the ray directors would destroy fire-ball and Martians as thoroughly as though they had never existed at all.

BUT then a strange thing happened. At that exact moment, timing their actions to fractions of seconds, the Martians raised and pointed their canelike weapons of the spurtling flames. They pointed them, however, not at the Earthlings, but at the fire-ball which had brought them to Earth!

Instantly the fire-ball exploded as with the roaring of a hundred mighty volcanoes—and the descending flight of the Gens of Cleric was blasted into countless fragments! Bits of them flew in all directions. Many dropped, the mangled, infinitesmal remains of them, down to the roof of Earth, while many were hurled skyward through formations above them—while those formations, to a height of a full two miles, were broken asunder. Many flights above that first flight were smashed and broken, their individual members hurled in all directions by that one single blast of a single fire-ball.

Individuals who escaped destruction were hurled end over end, upward through other flights higher above, and the whole aggregation of flights which had been concentrated on that first fireball was instantly demoralized, while full fifty per cent of its individuals were instantly torn to bits!

Sarka groaned to the depths of him.

"The leader of the Martians, or the master who sent them here, sent them here to win. For if they do not win, they cannot return to Mars, as they will have destroyed their vehicles! Their confidence is superhuman!"

"Have faith in the courage of Earthlings, son!" said Sarka.

It was much to ask, for if one single one of these fire-balls could wreak such havoc with the people of Earth, what would be the destruction by the countless other unexploded fireballs of the Martians?

STILL, the Spokesmen themselves must discover a way to hold their own, to win against the Martians. For Sarka there was greater work to do. He must oppose the wills of Luar and of Dalis in a mighty mental conflict, which would decide whether the homes of men would be saved, or utterly destroyed by the Moon-cubes.

But as he left through the Exit Dome, with Jaska by his side, he shuddered, and was just a little sick inside as he saw the fearful result of that first explosion of a Martian fire-ball! Bits of human wreckage were scattered over the Earth for a great distance in all directions from where the fire-ball had exploded. And at that spot a gigantic crater had been torn in the roof of the world, going down to none knew what depths.

Even the Martians, here only to consolidate positions which had passed the demolition of the Moon-cubes, were capable of demolitions almost as ghastly and complete as those of the cubes!

The sound was incapable of being described, for outside the laboratory the sound of the advance of the Moon-cubes eating into the dwellings of men, tumbling them down, grinding them to powder, was cataclysmic in its mighty volume. A million express trains crashing head-on into walls of galvanized iron at top speed, simultaneously.

Ear-drum crashing blows as fireballs exploded. The screams and shrieks of maimed and dying Earthlings—of Earthlings unwounded but possessed of abysmal fear.

THEN, resolutely, Sarka turned his back on the conflict between the Martians and the people of Earth, and

hurtled across the devastated roof of the world toward that area which was feeling the destructive force of the vandal cube-army. As he flew, Jaska keeping pace with him in silence, his mind was busy.

Passage through the white flames of the Moon had given him the key. Those white flames—source of all life on the Moon—rendered almost godlike those whom it bathed . . gave them unbelievable access of mental brilliance . were the source of that blue column which had forced the Earth outward toward Mars . . . were the source, in some way, of the cubes themselves, as he and Jaska, after passing through them, owed their now near-divinity to the same white flames! Those flames had made Luar mistress of the Moon—therefore of the Gnomes and of the cubes! Therefore, Sarka, having been bathed in the flames, should make himself master of the cubes, if he could out-will the combined determinations of Luar and of Dalis!

His confidence was supreme as he fled through outer darkness toward the eery light which came from the area of demolitions. Looking ahead, he could see tiny glows in the sky, which he knew to be the rebels of Dalis' Gens, flying to keep their rendezvous with him.

Higher mounted his courage and his confidence as he approached the roaring crash, perpetual and always mounting, which showed him where the cube-army was busiest. The sound vibrated the very air, causing the bodies of Sarka to tingle with it, causing them to flutter and shake in their flight with its awesome power. But they did not hold back, flew onward through the gloom, leaving behind them the brightly lighted areas where Gens of Earth battled with the fireballs of the Martians, moving into the area of the eery glowing of the cubes.

JUST as he approached the spot where mighty dwellings were tumbling before the march of the cube-army, he sent a single command toward the cube which had piloted him from the Moon.

"Come to me on the edge of the crevasse nearest the place of most destruction!"

Would the cube now be subservient to his will? He wondered. Everything depended upon that. If not, then he might as well try to stay the forces of a mighty avalanche with his breath, as halt the cube-army with his will.

But strangely enough, the closer he came to the vast area of tumbling dwellings the calmer he became, the more sure that he would win against the cubes.

For when he landed at the lip of the crevasse, across which he could look for a hundred miles, a single cube gleamed brightly almost at his feet, awaiting his orders!

One by one, by twos, threes, fours, dozens, came the glowing people who had been bathed in the white flames of the Moon's life-source, and as each dropped down beside him, Sarka gave a command.

"Drop down in the midst of the cubes! Make your own cube the rallying point for this vast army of cubes, force the cubes to desist in their mighty destruction, be subservient to your will—and do you, each of you, be subservient to *my* will!' '

AWAY dropped the rebels, glowing points of white flame, dropping down the sides of the crevasse, a mighty, awesome canyon, into the very heart of the activity of the cubes, and from the brain of Sarka, aided by the will of Jaska, went forth a simple command:

"Cease your march of destruction, O Moon-cubes, and harken to the will of Sarka, your master!' Draw back from your labors, and muster, not as squares, rectangles and columns, but as individual cubes, in the area already devastated by you! Rally about the glowing people who have passed through the flames which were your Moon-mother,

and wait for orders! Take no further heed of commands from Dalis and Luar!"

Instantly it seemed to Sarka that he had drawn into some invisible vortex which tore at his brain, at his body, at his soul. Inside him a cold voice seemed to say:

"Fool, Sarka! My will is greater than yours!"

But though the force of the will of Luar, whose thought he recognized, tore at him, almost shriveled the soul and brain of him with its might, he continued to send his thought-command out to the Moon-cubes, forcing it through the wall of Luar's will, hurling it like invisible projectiles at the cube-army below.

Exultation possessed him, buoyed him up, gave him greater courage and confidence as the moments passed for even as all his being concentrated on the will-command to the cubes, his senses told him that the mighty sound of destruction was dying away, fading out.

SLOWER now the dwellings fell, slower moved the Moon-cubes; and as they slowed in their mighty march through the dwellings of men, so increased the confidence, the power of will, of Sarka and his people—the rebels of the Gens of Dalis.

Then, after an hour, whose mighty mental conflict had bathed Sarka in the perspiration of superhuman effort, the sound of destruction ceased all together, and the dwellings ceased to fall.

A silent shout, like an inborn paean of rejoicing, surged through Sarka as he noted the retreat from the dwellings of men, of the Moon-cubes! Back and back retreated the squares and the rectangles, the columns and the globes, breaking apart as they retreated.

Within fifteen minutes after the destruction had ceased, millions of gleaming cubes winked upward from the bottom of the crevasse—motionless, quiescent!

Sarka sent forth another thought.

"I am your master, O cubes of the Moon!"

No sound, no movement, answered him.

"Luar and Dalis are no longer able to command you!"

Still no sound or movement of the cubes.

THEN, taking a deep breath, as of a swimmer preparing to dive into icy water, Sarka gave a new command.

"Dissolve! Reform on the roof of the world in globes! Roll over the face of the Earth, destroy the fire-balls of Mars—and take prisoners, inside the globes, the attackers from Mars!"

Instantly the gleaming cubes vanished, and darkness as of a mighty pit possessed the crevasse of destruction. Then, at the lip of the great crevasse, the cubes swept into form—myriads of globes which gleamed with the cold blue brilliance of the Moon!

They had no sooner formed as globes than they were in action again, rolling over the roof of the world as with a rising crescendo of thunder tumbling down the night-black sky. So mighty was their rush that the roof of the world trembled and shook.

Above their charge raced Sarka and Jaska, and with them the rebels of the Gens of Dalis.

All were present when the cubes crashed into the fire-balls from Mars, swept the Martians within themselves as prisoners, held them securely—and continued on, destroying the fire-balls in myriads. Here and there fire-balls exploded on contact, destroying the globes, which immediately reformed again, as though the explosions had not been felt at all.

SARKA had won the allegiance of the Moon-cubes, which had defeated and taken prisoners the Martians, destroying the vehicles in which they might have returned to Mars. And as realization came, darkness settled over the roof of the world; the last flare of Mars faded and died.

This done, the cubes formed in mighty rows, facing the laboratory of Sarka. His heart beating madly with exultation, Sarka studied them. Then he stepped into the Observatory, gazed away across the space which separated the Earth from the Moon, sent a mental message winging outward.

"Luar! Dalis!"

Faintly, fearfully, came the answer.

"We hear, O Sarka!"

"Shift the blue column away from the Earth! Do not interfere as we return to our orbit about the sun! Obey, or I combine the total knowledge of Mars, the Earth, and the Moon in an attack against you and your Martian ally! Inform your ally that their people will not return, that the Earth has need of them—but that two Gens of Earth will be received by Martians in perfect amity, and these Gens allowed biding places on Mars! Unless your ally obeys, the Martians in my hands will be destroyed!"

In an hour the answer came, the snarling thought-answer of Dalis.

"We hear! We obey! But Dalis is never beaten while he lives! His day will come!"

SARKA found himself feeling even a little sorry for sorely beaten Dalis; but his face was grim as he sent another command to the people of Dalis who had passed through the life-source of the Moon.

"Take command of the cubes, and force them to repair the damage which has been done to the dwellings of men—to repair them completely, over all the face of the Earth!"

As the glowing people hurried to obey, Sarka softly asked his father:

"But what shall we do with the Martians?"

Sarka the Second smiled.

"Release them and send them to the lowest level where, guarded by the cubes, they will be set to constructing fireballs like those in which they arrived for the use of Earth if Dalis, or the Martians, ever attack again! And, son. . . ."

"Yes, O my father?" said Sarka softly.

"I have another suggestion for the employment of the cubes! Let them build aircars to be used by the Gens of Prull and of Klaser, as transportation to Mars whenever you are ready for them to go!"

Sarka smiled boyishly, happily.

"Yes, O my father; and is there anything else?"

"Yes! Take Jaska as your mate! Do you not see that she is waiting for you to speak?"

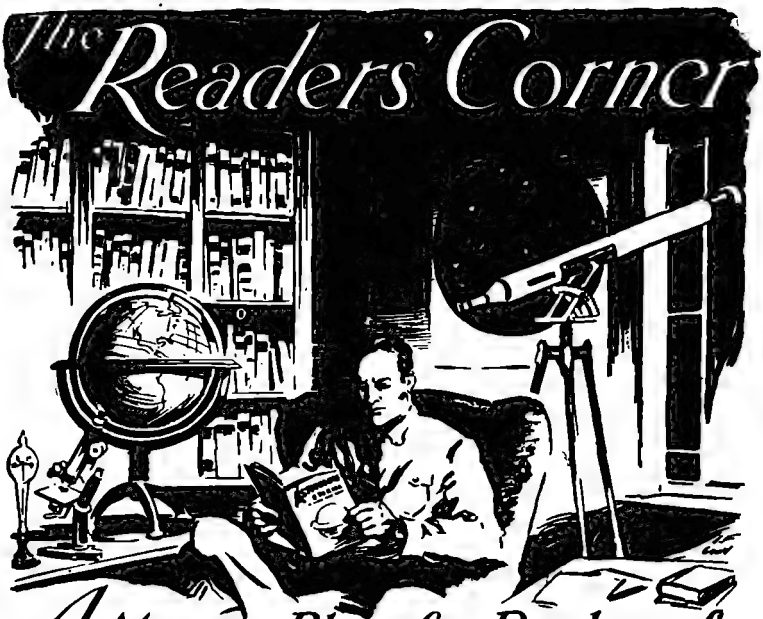
Sarka turned to Jaska, whose face was glorious in her surrender, and whose lips were parted in a loving smile—which faded only when Sarka's lips caressed it away.

(The end.)

ASTOUNDING STORIES

Appears on Newsstands

THE FIRST THURSDAY IN EACH MONTH



A Meeting Place for Readers of Astounding Stories

From Australia

Dear Editor:

I am taking the privilege of writing to you in an endeavor to show my appreciation of your magazine Astounding Stories.

Although I am an inveterate reader I must say that I have never read any book or magazine to come up to the above, and confess that though I am ignorant of the intricacies of science (and lacked interest in same prior to my reading your first issue) same is described so plainly that I have no trouble in fully understanding exactly what the author conveys. I must thank you for this other interest in the monotony of life.

Have pleasure of informing you that through my enthusiasm have created several subscribers, and on occasions when adopting the age old custom of placing my foot upon the rail and bending the elbow, have entered into many a conversation and discussion re the different stories included in your magazine.

I assure you of my whole-hearted support in the furthering of the popularity of your enjoyable and unique work in my country, and wish you every success in your venture.—M. B. Johnston, 237 Flinders Lane, Melbourne, Australia.

Mr. Neal's Favorites

Dear Editor:

The other day I saw Astounding Stories on one of the newsstands. I purchased it, and after reading "Brigands of the Moon" I eagerly finished the rest of the magazine. I did not like "Out of the Dreadful Depths." In my opinion it should not be in a Science Fiction magazine. The only thing the matter with your magazine is that it is too small. I would like to read some stories in "our" magazine by Ed Earl Repp, David H. Keller, M. D., Miles J. Brewer, M. D., and Stanton Coblentz.—Francis Neal, R. R. 4, Box 105, Kokomo, Ind.

No Ghost Stories

Dear Editor:

I received your April issue and I think it is the best yet. I have but one complaint to make, and that is your magazine seems to print some good science stories, but also has some stories which do not belong in a Science Fiction magazine. They might come under the name of weird tales. Is your magazine devoted to pure 100 per cent. Science Fiction? If so, I think you ought to leave out the ghost stories.—Louis Wentzler, 1931 Woodbine St., Brooklyn, N. Y.

From the Other Sex

Dear Editor:

You'll be surprised to hear from a girl, as I notice only boys wrote to praise your new magazine. I tried reading some of the Science Fiction magazines my brother buys every month but I'd start reading a story only to leave it unfinished. But your magazine is different. When I picked it up to read it I thought I'd soon throw it down and read something else, but the moment I started to read one of the stories of your new magazine I read it to the finish. I never read such vivid and exciting stories. Even my brother who loves all kinds of Science Fiction magazines couldn't stop praising your new magazine. He said Astounding Stories beats them all.

Some of our readers criticized your new magazine, and I haven't anything but disagreement for them. Yet, who am I, to judge persons who have read and know all about Science Fiction?

Will recommend your new magazine to all my friends.—Sue O'Bara, 13440 Barley Ave., Chicago, Illinois.

January Issue Was First

Dear Editor:

I have just finished reading the April issue of "our" magazine. Can mere words describe my feelings? I am classing the stories as follows: A—excellent; B—very good; C—good; D—passable; E—poor.

A—"Monsters of Moyen," "Vampires of Venus," "The Ray of Madness," "The Soul-Snatcher."

B—"The Man Who Was Dead."

C—None. D—None. E—None.

"Brigands of the Moon" is getting more and more interesting. Can you please tell me which month's issue was the first one, as I didn't procure the first two copies and should like to do so?—Eli Meltzer, 1466 Coney Island Ave., Brooklyn, N. Y.

"Eclipses All"

Dear Editor:

Just as soon as your new magazine came out I espied it. It eclipsed all the other magazines on the stand. As a cub magazine I couldn't ask for more.

I am going to comment on your stories now because I know you want me too, for I know you would like to know what sort of stories your readers like.

I have a lot to say about Ray Cummings. He is the best writer I have ever seen. His stories couldn't be beat. "Phantoms of Reality" was a corking good story, but I believe his new serial, "Brigands of the Moon," is going to be better. Captain S. P. Meek is a very good writer also. I take immense joy in his Dr. Bird stories. And we must not forget that great writer, Murray Leinster. His stories are really good.

I congratulate you on your new magazine, Mr. Editor.—Albert Philbrick, 117 N. Spring St., Springfield, Ohio.

"A Unique Magazine"

Dear Editor;

I've been trying to write your magazine for a long time, so here goes.

I've bought every copy from the first issue and sure think it is a good magazine. In fact I should say a unique magazine; there are but few magazines in its class among Science Fiction magazines. The stories come up to the standards of good Science Fiction, and some go far above it. A few stories I did not like were: "The Man Who Was Dead," "The Soul Snatcher," "The Corpse on the Grating" and "The Stolen Mind." The science in all these stories was very poor. But your magazine became better in my eyes when you published "Phantoms of Reality," "Tanks," "Old Crompton's Secret," "Brigands of the Moon," "Monsters of Moyen," and all of Captain S. P. Meek's stories. These were extraordinarily good stories.

Wesso's drawings are very good, and I hope you keep him. I have seen his drawings in another magazine for quite a time. I don't like the illustrations of your other artist. Could you, by chance, secure an artist by the name of Leo Morey or Hugh Mackay? They both illustrate for other Science Fiction magazines and are about as good as Wesso. Please keep the latter. And why don't you have him to do all of your illustrating?

Sorry to seem such a grouch, but I don't like your grade of paper either. And why not enlarge the magazine to about 11" x 9" by ½", and charge 25 cents for your thoroughly good magazine, apart from the defects I have mentioned.

About your authors. They are, for the most part, good. But they are mostly amateurs at writing Science Fiction stories. I am delighted to see such expert writers of Science Fiction as Harl Vincent, Ray Cummings, Victor Rousseau and Captain S. P. Meek writing for your magazine, but couldn't you include in your staff of authors A. Hyatt Verrill, Dr. Miles J. Breuer, Dr. David H. Keller, R. F. Starzl, and a few more such notable authors? I hope to see these authors in your magazine soon.—Linus Hogenmiller, 502 N. Washington St., Farmington, Mo.

The Star System!

Dear Editor:

One star means fairly good, two stars, good; three stars, excellent; four, extraordinary; no stars—just another story.

I give "Brigands of the Moon," by Ray Cummings, three stars; "The Atom-Smasher," by Victor Rousseau, three stars; "Murder Madness," by Murray Leinster, two stars; "Into the Ocean Depths," by S. P. Wright, two stars, and "The Jovian Jest," by L. Lorraine, no stars. It was short and sweet.

Wesso sure can draw. I would like to see a full page illustration for each story by him.

My favorite type of stories are interplanetary, and, second favorite, stories of future wars. Will you have many of them in the future? I like long stories like the novelette

in the May issue of Astounding Stories—Jack Darrow, 4225 N. Spaulding Ave., Chicago, Illinois.

We Expect Not To

Dear Editor:

While going over your "The Readers' Corner" of the April issue, I noticed in your answer to one of the letters that you will avoid reprints. Now many of your readers have not read the older classics of Science Fiction. Would it not be a good idea to publish a reprint at least once a year? One of the suggestions given was Merritt's "Through the Dragon Glass." Another very interesting story, and one that I am sure almost all of your followers have not read, is "The Blind Spot," by Homer Flint.

I like the idea of having three numbers to a volume, as it will be much easier to bind. Now, starting with the April issue, I think that the best story in there is "Monsters of Moyen." "The Ray of Madness" was up to the usual standard of Capt. S. P. Meek's stories. "The Man Who Was Dead" was fairly good; average, I would say. I did not like "Vampires of Venus."

I say that the May issue was the best of the Astounding Stories. I was satisfied with every story in it. "Into the Ocean Depths" was the best story, "The Atom Smasher" being a close second. I like the way the story "Into the Ocean Depths" ended; a slight trace of sadness and not at all like the "and they lived happily ever after" ending. A real story.

I was disappointed in not finding any story concerning Dr. Bird in the April issue. Will any more be printed soon?

Before I close I would like a definite answer to this question: Will you ever, or in the near future, reprint any of the gems of Science Fiction, stories by the late master Garret P. Servisa, or from the pen of A. Merritt and H. G. Wells?—Nathan Greenfeld, 318 E. 78th St., New York City.

Again Reprints

Dear Editor:

Although I am a reader of six Science Fiction magazines, I was more than glad to see the latest one out, Astounding Stories. Because the stories are all interesting, I consider Astounding Stories superior to most of the Science Fiction periodicals on the newsstands to-day.

My favorite stories are those of interplanetary voyages and other worlds. My favorite authors are: Ray Cummings, A. Merritt, Victor Rousseau, Murray Leinster, Arthur J. Burks and Harl Vincent. I hope that you will soon have stories by Edmond Hamilton and David H. Keller.

Now here is something I hope you will give some thought and consideration. I noticed that many of the readers wrote in, requesting reprints. I am one of those who would like to see you publish some reprints, especially stories by Edgar Rice Burroughs, A. Merritt and Ray Cummings. These authors have written many masterpieces of Science Fiction. It is very difficult, if not impossible, for a person to get these stories. They could be made available easily if Astounding Stories would reprint them.

Most of the readers who object to reprints do so because they would hate to see a story by H. G. Wells or Jules Verne. I, myself, do not like these authors as they are too dull. But if you have only reprints by the three authors I mentioned and a few other popular writers, I am sure all the readers would welcome them. At least you could have a vote and see how they stand on reprints.—Michael Fogaris, 157 Fourth St., Passaic, N. J.

Likes "The Readers' Corner"

Dear Editor:

Your "The Readers' Corner" interests me very much. It surely does show how your magazine pleases its readers. You cannot get too much science in your stories to suit me. Chemistry and physics more than anything else.

I surely enjoyed reading "Mad Music" and "The Thief of Time." I don't like long stories. They are too interesting to have to wait a month for the next part.

I hope that your magazine continues to have as "astounding" stories as it has in the past.—Vern L. Enrich, R. F. D. 1, Casey, Illinois.

From Master Weiner

Dear Editor:

One day coming home from school I saw your magazine. That night I bought it and have since been an ardent reader.

But why not give us a change? I prefer stories of the Sargasso Sea, the Maelstrom, and about invasions of the Earth.—Milton Weiner, age 12, 2420 Baker St., Baltimore, Maryland.

High Praise

Dear Editor:

Enclosed you will find twenty cents in stamps for the first copy of Astounding Stories.

I have just finished the May issue of Astounding Stories and the rating of the stories is: 1—"Brigands of the Moon"—Excellent! 2—"The Atom Smasher"—Marvelous! 3—"Murder Madness"—Perfect. 4—"Into the Ocean's Depths"—Good. 5—"The Jovian Jest"—Pretty Good.

The cover design by H. Wesso is good. Don't lose him.

I would like more stories by Victor Rousseau and Ray Cummings. Where are some stories by H. G. Wells, Stanton Coblenz, Gawain Edwards, Francis Flagg, Henrik Jarve and Dr. Keller? My favorite stories are interplanetary stories.

Here are some things that may improve your magazine (though I must say that your magazine is about perfect as it is): More pictures in long stories; about two novelettes in each issue; about two short stories in each

issue; more interplanetary novels and novelettes; about one serial in one issue; smoother paper.—Isidore Horowitz, 1161 Stratford Avenue, New York City.

"Fairly Good Satire"

Dear Editor:

I have read your two issues of Astounding Stories and I feel they will fill a very much needed place in literature.

I am especially interested in the stories like the "Vampires of Venus" and the "Brigands of the Moon." The "Vampires of Venus" can be classed as a fairly good satire on Earth beings; I consider that story one with a moral. It reminds one of Voltaire's Micromegas, and it's taking us to another planet to show us our faults at home will stimulate interest in social improvement.

I have kept tab on Edgar Rice Burroughs' writings because he teaches evolution in a way that makes it easy for the ordinary reader to grasp.

You have a great field, if you can keep up the interplanetary stories and mix some evolutionary stories with them.

The true stories are playing a valuable part in stimulating people to take a deeper view of life, and you have a field in Astounding Stories almost without a competitor.—J. L. Stark, 830 Sutcliffe Ave., Louisville, Kentucky.

He Is H. W. Wessolowski

Dear Editor:

Since I have read every copy of Astounding Stories since it was inaugurated I feel well qualified to contribute a few bouquets and also some criticism. The cover illustrations are wonderful but I cannot find the artist's name on it. So good an artist should put his "moniker" on his productions. I am glad to see that the words "Super-Science" are on the top of the cover in bright red letters; some other Science Fiction magazines seem desirous of disguising the contents of their magazines for some obscure and mysterious reason.

And now a brickbat. It is my humble opinion that the science should be examined more carefully before the stories are printed in this excellent magazine. The stories should be not only astounding, but should contain some science information that will be remembered after the fiction is forgotten. "The Man Who Was Dead" is an excellent ghost story or weird tale, but is out of place in "our" magazine. (I take the liberty to call it "our" magazine since a department is given over to the readers and we express our choice of the kind of stories that are printed.) However, taken all together, our magazine is steadily improving; each issue up to now has been distinctly better than the one before.

I have graded the stories in the April and May copies as follows: Excellent—"Vampires of Venus," "The Ray of Madness," "Brigands of the Moon," "Murder Madness," "Into the Ocean's Depths" and "The Jovian Jest." Good—"Monsters of Moyen," "The Atom Smasher" and "The Soul Snatcher." Poor—"The Man Who Was Dead."

My favorite authors are Dr. David H. Keller, Harl Vincent, Lillith Lorraine, Anthony Pelcher, Capt. S. P. Meek, Dr. Miles J. Breuer and Ray Cummings. I can hardly wait a month for my next copy.—Wayne D. Bray, Campbell, Missouri.

Story Says Cro-Magnons Fled to Europe

Dear Editor:

Ever since I was first introduced to Astounding Stories by a cousin I have been a steady reader. I have not missed a single issue so far.

I hope you will have stories by Hyatt Verril, Edgar Rice Burroughs, Edmond Hamilton, Leslie Stone, Stanton A. Coblentz and Francis Flagg.

The stories I liked best in each issue (not counting serials) are: "Phantoms of Reality," "Spawn of the Stars," "Vandals of the Stars," "Vampires of Venus" and "The Atom Smasher." In "The Atom Smasher" it says that all the Europeans descended from the Atlanteans. Now when the hero killed them all with the disintegrating ray, would he not have affected their birth?

Wesso is some artist. I saw a mistake in the cover of the March issue. The color of space is a deep black, not blue, because the blue color of the heavens when viewed from the earth is due to the reflection of light by the atmosphere.—George Brande, 141 So. Church St., Schenectady, N. Y.

"The Readers' Corner"

All Readers are extended a sincere and cordial invitation to "come over in 'The Readers' Corner'" and join in our monthly discussion of stories, authors, scientific principles and possibilities—everything that's of common interest in connection with our Astounding Stories.

Although from time to time the Editor may make a comment or so, this is a department primarily for *Readers*, and we want you to make full use of it. Likes, dislikes, criticisms, explanations, roses, brickbats, suggestions—everything's welcome here; so "come over in 'The Readers' Corner'" and discuss it with all of us!

—*The Editor.*

"I'm Getting Fed-Up with this Grind"

"I've been looking around and I don't like what I see. Look at Pop Clark and Burch—been on the job for ten and fifteen years—and they don't make as much as we do because they've slowed up.

"That doesn't look so good to yours truly. Me for the boss-job, and big pay and a real future. I don't know how I'm going to get there but I'll sure bust a leg trying."

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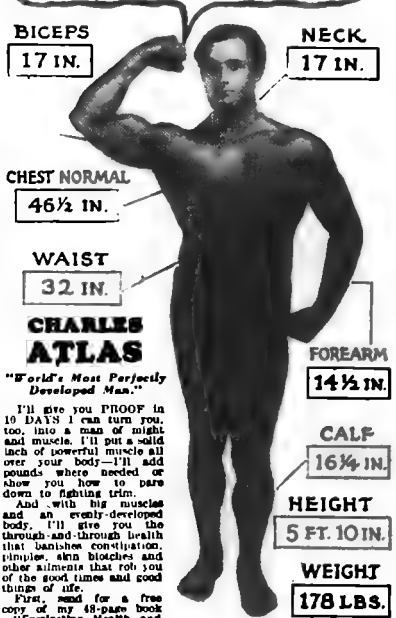

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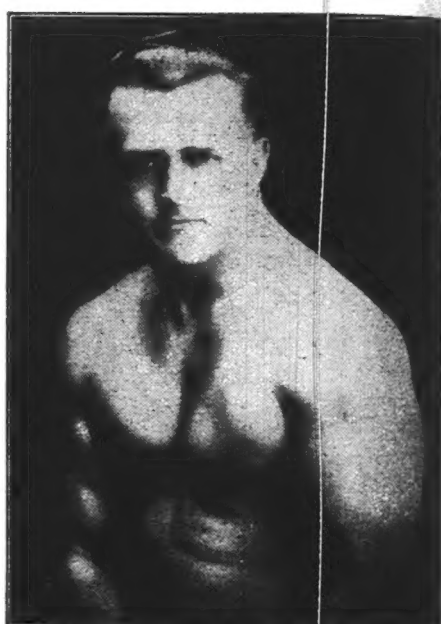

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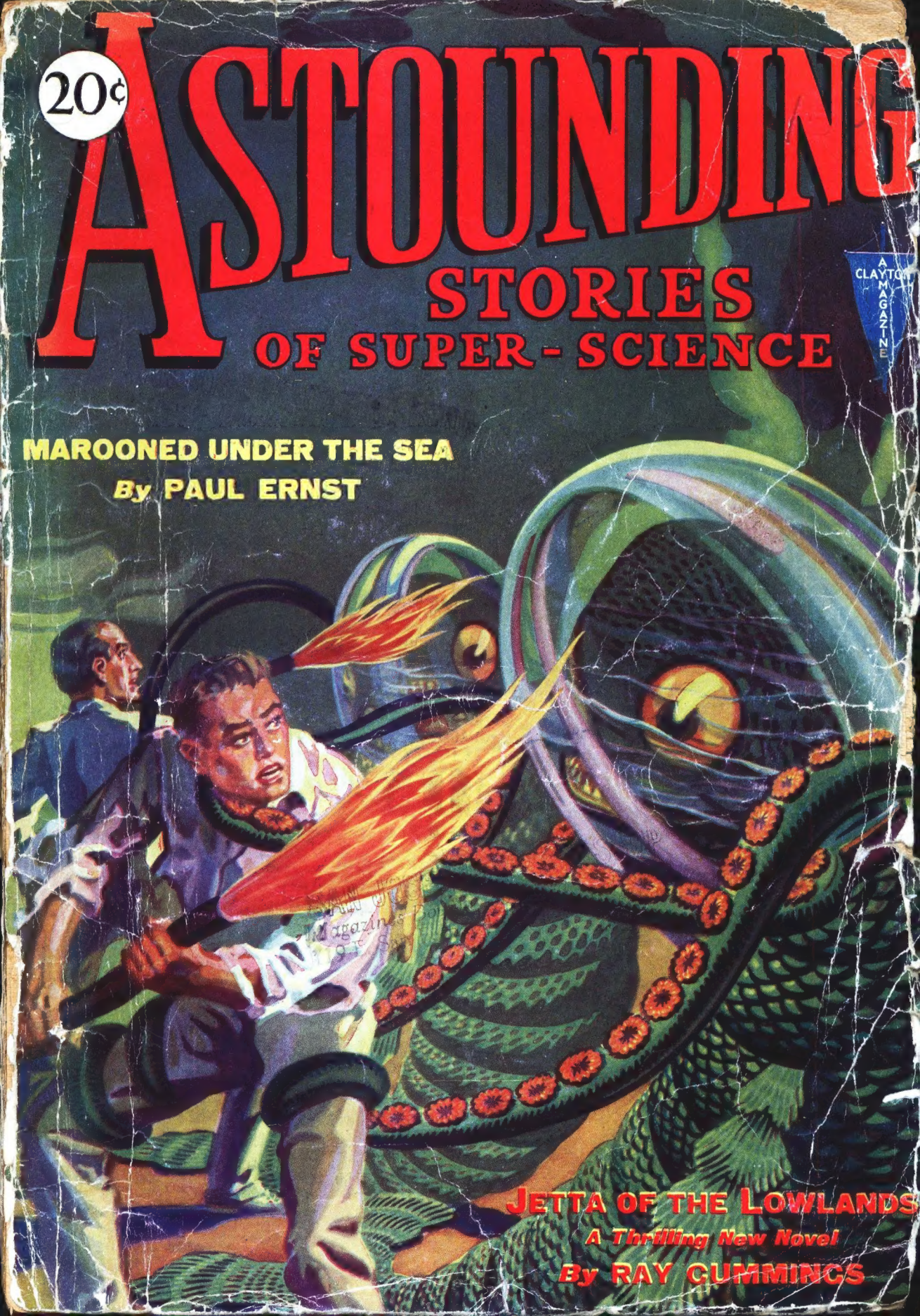

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